AMERICAN AGRICULTURIST.

Designed to improve the Farmer, the Planter, and the Gardener.

AGRICULTURE IS THE MOST HEALTHFUL, THE MOST USEFUL, AND THE MOST NOBLE EMPLOYMENT OF MAN.—WASHINGTON.

CONDUCTING EDITOR,
ORANGE JUDD, A. M.

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☞ SEE LAST PAGE. ☜

☞ ALL letters relating to Editorial matters should be addressed to Mr. ORANGE JUDD, (the Conducting Editor).

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FOREIGN MANURES.

WE are daily making the subject of fertilizers or manures our chief study. How to better husband and apply the stores of the farm-yard, is a question of the highest importance to every farmer; and next to this is one every day put to us, viz: "What foreign fertilizer do you advise us to procure?" To the former question we shall often recur in a future series of articles now in course of preparation. The latter we will now briefly advert to. But first let us give one article of our creed, to-wit:

No intelligent farmer can afford to buy any foreign fertilizer, until he has first used those produced upon his own farm.

Of foreign manures there are four classes:

1. Those of which the general utility for most kinds of crops and soils has been established.

2. Those which are applicable to special soils or crops.

3. Those worthy of experiment.

4. Those which for at least some crops or soils are valuable in themselves, but whose market-value depends upon the honesty of the manufacturers.

1st Class.—In this catalogue we can only place *unburned* bones, ground or dissolved; and genuine Peruvian guano. Leaving out of the question the real or supposed value of the mineral portion of bones (the phosphate of lime), we know that they contain a large amount of animal matter, and that there is hardly a plant or crop that grows which is not more or less nourished, fed, or stimulated, by the products of decaying animals or vegetables. When bones are finely ground, or dissolved in an acid, the animal matter is reduced to a state in which it becomes immediately available. Let the crop be wheat, corn, rye, oats, or other cereals; turnips, carrots, beets, or other roots; the various grasses; or any of the garden plants or vegetables, finely ground *unburned* bones, or those dissolved, will not fail to increase the growth in a soil properly prepared, whether applied directly to the seed, put on as a top-dressing, or mingled with the soil. The degree of benefit immediately derived will depend much upon the completeness of the grinding, or dissolving, and the consequent readiness of the materials to at once supply the wants of the growing plant. This will also be governed by the amount of the application, the time and mode of using, the sterility of the soil, and the physical condition as respects pulverization, dryness, compactness, &c.

There is at the present time a supply of bone-dust in the principal markets, which can be purchased at prices varying from $2 to $3 50 per barrel of 150 to 300 lbs. The variation in price depends chiefly upon the quality. It is economy always to get the best that can be procured. Bear in mind what we have said about *fineness* of grinding if immediate effect is desired. The more coarsely ground will operate less speedily, and last longer. If a soil is comparatively poor, it should be entirely treated to a dose of the fertilizer, and an additional application be made to the seed to supply its first wants, which is a matter of paramount importance, since the first organs being developed, the plant will afterwards better provide for its own wants. If the soil is comparatively rich in vegetable or organic materials, it will then be better to make the application near the seed to supply the first wants alluded to.

We do not know of any artificial preparation in the market, which is manufactured from *unburned* bones. In another article in this number, (page 40,) we have given the method of dissolving bones in acid.

Guano.—There are various kinds of this in the market, such as the Peruvian, Mexican, Chilian, African, Patagonian, &c., but our experience and observation is, that none of these except the first named, (and of this only that procured direct from the agents of the Peruvian government), have a character sufficiently high and definite to warrant farmers in purchasing them. A considerable quantity of some of the others, has been manufactured or revamped in this country, and when brought from abroad there is no guarantee that they are much superior to *washed* barnyard manure.

Peruvian guano, as usually sent to this country by the authorized agents of the government, consists of the remains of birds and their droppings, which have been dried under a tropical sun, where no rain falls to wash away the more valuable soluble portions. It is much such a compound as would be formed by shutting up in a warm dry roost a number of fowls, and allow them—well fed the while—to die and dry up, mingled with their droppings. The experience of every farmer is sufficient to convince him, that the compound thus formed would be a valuable fertilizer for any crop. Just such a compound is good Peruvian guano.

What we have said of the manner of using bone-dust, applies to guano, with this exception, that guano is a more caustic substance, and it should never be put directly in contact with plants or seeds. It may be first mingled with a considerable quantity of muck, earth, or manure in the compost heap or otherwise; or it may be mingled with soil by plowing in previous to planting or sowing or it may be put near the hill and mingled with a quantity of earth, but separated from the seed by a layer of soil; or, finally, where it has not been practicable to mingle it with the soil before, it may be sown broadcast upon the surface after the seed is in the ground. In this case it should be worked into the soil with the cultivator or hoe.

The most effectual mode on poor soil is, to divide it into two portions, plowing the larger portion into the soil for some time previous to sowing or planting, and at the same time intimately mix the other portion with a large quantity of muck or manure, to be applied with seed, after it has lain for a time and lost its causticity. In this way the first wants of the plant are supplied at once, and there still remains another portion for the future nourishment of the extending roots.

Of the exhausting effects of guano upon the soil, we have not room here to enter into the discussion. Suffice it to say, that we have not yet found sufficient reasons, derived from theory or experiment, to believe that guano is ever exhausting, in the proper sense of that word. That, when applied to crops, it supplies their first immediate wants, and develops larger organs for appropriating more speedily what of organic food there is in the soil originally, there is little doubt. This is a matter of time and economy. If, for example, a soil contains only organic food for fifty bushels of wheat, and five sucessive crops of ten bushels each would, by the ordinary course of cultivation, be required to use up all that organic matter, it would certainly be economical to stimulate two crops by an application of guano

and get the whole 50 bushels in the two crops, even though the soil should be *exhausted* at the end of two years instead of five.

The discussion of the remaining three classes of foreign manures will be continued in our next.

For the American Agriculturist.

ON THE IMPORTANCE OF THOROUGHLY PULVERIZING THE SOIL.

The importance of thorough tillage, of effectually pulverizing the soil under cultivation, so far as it can conveniently be done, is not sufficiently appreciated. It is not supposed that rocks can be crushed or boulders and pebbles disintegrated; but earth plowed when wet, and left like brick to bake in the sun's heat, can and should be pulverized to a perfect mold, before entrusted with seed or a remunerating crop expected.

Corn planted upon an uncovered rock will not grow, and the reason is obvious, there is no soil to shield its tender roots from the scorching effects of the sun, and yield it moisture and nourishment. Planted in a soil, composed one half of coarse gravel or hard baked clay lumps, and the other half of fine earth or loam, it will grow and ripen grain; but the drouth will curl its leaves, its growth will be less luxuriant, and the yield about one half, all things the same, as it would have been if planted in a soil wholly composed of a fine rich loam. Hence the inference is just, that a soil only half pulverized or composed one half of coarse pebbles, is only half way removed from rocky sterility.

Fertility depends very much upon the pulverized condition of the soil and the fineness of its component particles. The finer the soil the greater is the relative surface which that soil presents to the roots of plants, and the power which plants possess of deriving from the earth their requisite nourishment, is increased in the same proportion.

It has been said that "the most productive soils have the greatest absorptive power for moisture." The absorptive, as well as the retentive power of soils, is in exact proportion to the fineness or pulverent condition of their component particles. A rock or a baked mass of unpulverized earth, derives no moisture from a damp atmosphere, or from the dews of night. Dampness may gather upon their surface, to be evaporated again into the atmosphere by the first rays of the morning sun. Not so with finely pulverized earth, which imbibes the dew and the moisture from a damp atmosphere, and holds it in reserve for the roots of plants as they may desire.

Every farmer knows that the alluvial soils, in valleys and bordering rivers, are the most productive and inexhaustable; that with the same culture they will stand drouth better, and yield heavier returns, than the surrounding uplands. The reason of this is mainly attributable to the fact, that such soils are not only composed of a happy blending of organic and inorganic elements, but, being washed down from surrounding elevations, are of the uneaqualed fineness and disintegration.

I have said that a soil half composed of coarse gravel and stones, was but half way removed from rocky barrenness. Every farmer knows that such soils require almost an endless quantity of manure, frequently repeated, and extra tillage, to produce from them remunerative harvests. Now, any soil, though its composition may be the most desirable in the world, if allowed to bake, and, in the process of tillage, remain only half pulverized, is no better than that above mentioned. Hardened or integrated lumps of clay or earth, so far as contributing to the growth of plants is concerned, are no better than the same amount of boulders.

Plants in their process of growth, can derive nothing from the soil but what is held by water either in solution or suspension. Hence, the necessity of thorough pulverization applies as well to manures as to earth. Dried lumps of manure, around corn hills or upon the surface of a meadow, so far as contributing to fertility, are but little better than the same amount of chips or stones.

How many farmers plant, pulverizing with the back of the hoe just enough of soil to cover the seed, and trust to the roots of the coming plant to seek for a meager subsistence among the surrounding hardened lumps of earth, and then perhaps reproach Providence for an unproductive harvest! How many cart manure enough to bountifully enrich their lands, but, leaving it in lumps, within or upon unpulverized soil, it yields its richness to the desert air, instead of imparting it to the earth available for vegetable nutrition to the no small disappointment of the cultivator. It is fine earth only, that absorbs and retains, for the purposes of vegetable growth, the rich gases and soluble portions of manure.

This subject is one of paramount importance to the agriculturist. The thorough pulverization of soil and manure, is second to no other subject connected with the farmer's interests. O. C. Gibbs, M. D.

Perry, Lake Co., Ohio.

For the American Agriculturist.

FARMING IN ULSTER COUNTY, N. Y.

THE EFFECTS OF THE PAST WINTER—IMPLEMENTS—MORE HELP SHOULD BE EMPLOYED BY FARMERS, ETC.

Shawangunk, Ulster Co., March 17, 1855.

While the past year has been one of prosperity to the farmers in some parts of our widely extended country, it has been a time of peculiar embarrassment to the majority in this region of the State. The cold and backward spring of last year, succeeded as it was by an unparalleled drouth, resulted in a great decrease of all the ordinary products of the soil, excepting hay, which was nearly or quite an average crop. Wheat is not raised here to any considerable extent; but the few fields which were cut last year were almost an utter failure. The result has been that, last fall carcely any wheat was sown in this vicinity. The granaries of our farmers at this time present a very lean and meager aspect. Not a few are under the necessity of purchasing supplies of grain for the use of their families, at prices ranging quite above those which obtain in the New-York markets. The stock of fodder is also much less abundant than was expected. This is to be ascribed to three causes. The prevalence of the drouth greatly diminished the fall pasturage, and compelled many to make early drafts upon their winter supplies. The winter has been long and excessively cold, (the mercury several times sinking below zero, and on one occasion to 20 degrees below zero,) and consequently more food for stock has been required. In addition to this, farmers who have been accustomed to feed grain freely, have this year been compelled greatly to diminish the quantity, and of course to draw more heavily upon their hay. Very few farmers in this region have, as yet, provided themselves with any suitable cutting apparatus for reducing their straw, cornstalks and coarse hay to chaff, whereby so great a saving in fodder is secured. Few roots are raised for stock, and it is very rare to see even a small patch of corn sown in drills, or broadcast, for feeding to stock while green, or in a cured state. I should think that the costly experience of the past year would be effectual in opening the eyes of multitudes of our farmers, to the importance of making all possible provision against the evils of drouth, and other causes of the failure of crops, to which they were always liable.

I am sorry to say that farmers, as a class, are slow to learn, even in the school of experience, when the lesson to be learned relates to their own peculiar avocation. It is by no means easy to convince them of the propriety of any change in their modes of cultivation, and in the crops to which they shall direct their attention. Or even, if convinced, and half resolved to attempt some thing in the way of progress in their calling, the purpose is to often forgotten, or deferred in the hurry which each season brings with it; which unreasonable hurry, in turn, is to be ascribed, in no small degree, to the fact that most farmers undertake more work than can be properly accomplished with the force of hands engaged. This is a serious evil. A man alone, or with the aid of a boy, with a few days' help at distant intervals, undertakes to perform all the operations of a farm of a hundred or more acres. The necessary consequence is that the farmer himself is reduced to the condition of a mere drudge, and, daily, toils quite beyond his strength; his crops suffer in detail, for want of labor bestowed on them at the proper moment, and improvements are unattempted. Either let the industrious farmer lay his plans on a smaller scale, or else let him engage a larger force of hands to perform *well* the necessary labors of the season. I doubt not that the result in most cases would be an increase of health, enjoyment, and greater freedom from vexation, without any real diminution, but rather an increase of profits. It is a wise adage, though a trite one, "what is worth doing at all is worth doing well."

The severe cold of the past winter has been disastrous to tender fruits in this region. On my own premises, peach buds were all killed as early as December; and this I believe is true with regard to all the adjacent country. Possibly there may be exceptions on the higher grounds, and in peculiarly sheltered situations.

I have not taken pains to ascertain particularly what has been the effect of the severe cold upon other and more hardy fruits. I hope that they have escaped serious injury.

We have had numerous snows, but they have generally been light. When this was not the case, the drift was so great that we have had very little sleighing during the winter. Much of the ground having been bare during the severe weather, the effect upon winter grain, I fear, has been injurious. The fields at present wear an unpromising aspect; although our prospects may brighten materially with the coming of warm weather. At present there is still a great deal of frost in the ground, and the weather (though it has generally been favorable since the beginning of March), still remains cold and backward, and farming operations must necessarily be deferred for a few weeks longer. M.

Fall of Black Snow.—Prof. Fairchild, of Oberlin, Ohio, states that on February 7th, they had in that region a fall of dark-colored snow. The crystals were in the form of dense icy pellets, about the twentieth of an inch in diameter. It fell to the depth of nearly an inch, and when melted it yielded about a half inch of water. The snow had a distinct smoky taste, and on filtering it through paper a dark, sooty substance was obtained.

Widows' Tears.—A few barrels of liquor, on their way through Rutland, Vt., from Troy to Boston, were observed to be labeled, "Widows' Tears."

For the American Agriculturist.

PROFITS OF BEES.

BEES *versus* POULTRY.

In the *American Agriculturist* of January 24, No. 72, there is an article on Poultry, in which are some tall statements of profit. The subject is so well finished, and the profits so fairly stated, that it seems a pity to insinuate as a possibility that some specimens occasionally "eat their own heads off." But I don't intend to object to the article; on the contrary, I like it. I should have kept silent, however, but for the challenge in these words, "will any of our political economists please to indicate in what branch of rural, or other industry, an equal return can be made for capital and labor?"

Now I am disposed to put in the claims of my little favorites, the Bees, and see how they will stand the comparison. To pursue the course of the article alluded to, I could say with equal truth that, "more than double their value may be realized per annum in net profit;" and should they happen to exceed it over "four times," as they do in some seasons, there is no necessity of deducting "economical feed," for it should be remembered that "the bee works for nothing, and finds itself."

But, as a bill of items is more satisfactory than indefinite sundries, I shall give it, as I can furnish all the figures without guessing at a single item, having had one apiary the past season, of which a young man in my employ was half owner. The figures are copied from our settlement—he took the principal care, and I furnished the materials.

June 1st, 1854, this apiary consisted of 83 stocks; a few of them first best, most of them light, with stores just sufficient; some fifteen were entirely out, and had to be furnished with food in the spring, but they were all strong in numbers, having been wintered in the best possible manner, and the combs all clean and bright, without mold, &c. I find these bees charged with 60 new hives, at 25c. each $15 00
50 Covers to boxes, at 10c. 5 00
81 Stands, at 7c. 5 67
188 Glass hives, at 10c. 18 80
48 do. do. 15c. 7 20
Honey fed to some of the lightest .. 3 00
12 Firkins for strained honey 5 13
12 Cases for packing glass boxes for market, 29c. each 3 48
Team work 5 00
Freight to market 5 17
Time in attendance at $15 per month 34 00
Board, $2 per week 16 86
Interest on stock, 83 hives at $5 .... 29 05

$153 36

They are credited with honey and wax sold $438 41
After selecting out the poorest (over 40) such as contained diseased broods, &c., there were left 123 *good stocks* for winter, an increase of 38, at $5 each ... 190 00

628 41
Expenses deducted 153 36

Net profit $475 05

It will be seen that they have more than doubled in value notwithstanding the dry weather. Also all the new hives are charged to this year, 40 have been emptied and ready for another year are not credited. Hives last several years; the same of covers and stands. The time is the greatest item of expense, being every hour required in attendance, (an item seldom reckoned when figuring the profits of poultry), and includes the time of taking the bees out of the cellar, cartage, placing stands, looking for and destroying worms, putting on and taking off boxes, watching and hiving for several weeks in the swarming season, from 8 o'clock A. M. till 4 P. M., examining stock for diseased broods, taking up poor stocks, removing the combs, straining the honey, making wax, packing the boxes, taking to market, putting stocks in the house for winter, &c. Having an apiary at home, this one was located a mile and a half distant; consequently, much time was lost in going and returning, being more than it all amounted to while there. With but one apiary, and that at home, this part of the time would be saved, besides many other matters of waste which might be detected in season and prevented.

Now would you not enhance the value of farmer's products by encouraging *this branch* of rural industry, as well as poultry, which has this advantage, that while fowls are consuming much that is suitable for the food of man, the bee takes nothing! Thousands of this delicious food are annually wasted that might "be had for the gathering." It is produced by the forest, field, garden, and roadside; no place but the barren desert is destitute. It is yielded in quantities for ten thousand times the number of gatherers that we have at present. "The harvest is abundant, but the laborers are few." Probably one acre of buckwheat will produce 50 lbs. of honey, and white clover the same. The thousands of acres growing buckwheat and clover in the United States, or even this State, multiplied by 50 would compare somewhat favorably. Reduce this yield per acre on the average even down to one pound, and take the 640 acres on the square mile, the 47,000 square miles in New-York would show some 30,000,000 lbs.; or, when the square miles of all the States are multiplied by the same rule, we have in the aggregate a product worth looking at.

One locality can not be over-stocked with either poultry or bees without diminishing the profits of a proper number; but here again the advantage is with the bees, as it is impossible to keep fowls enough in one place for the net profits to amount to one half of the sum here shown.

Another thing: The reports of poultry profit gives us only the cost of feed. Why not give the time necessary for feeding, looking after eggs, packing, taking to market, &c.? I know that to feed a brood of chickens once takes but a short time, that it is a very small matter to set an old hen, and that it only takes a minute to get the eggs from the nest in the grass—after you have found it. "But these items are small trifles; children can do the most of it, or some one that would do nothing else at the time." Yet, most of these things must be done every day; a brood of chickens fed several times; then small matters in the aggregate amount to something. Now, to make a *fair comparison*, let us have the *whole* debit side of the chickens.

I will anticipate one objection which will be urged against raising honey, that is, the "uncertainty of success; that while any one has skill sufficient to raise poultry, few possess requisites for managing bees profitably." I would say in answer; only get a tenth part as many to engage in bee-keeping as have raised chickens, and the amount of experience gained would make success next to certain, or, as common in one as in the other; both would be equally plain. A dollar invested in a practical book on the subject would furnish all the "mysteries" necessary for successful management by any one of common ability. It can be done, too, with the cheapest possible hive *not patented*. I will challenge the whole fraternity of patent venders, to produce one more profitable than those I use! I have little doubt that the patent-hive business has done more to retard success in bee-culture than all other causes combined! It discourages by the expense; by failing to perform what is promised; by falsely representing that there are secrets and difficulties in the way, which *their* particular hive alone will obviate; that a peculiar shape to the hive is *all important*; that it is *first* and *last*, and everthing necessary for complete success throughout the whole business. In this matter it would be well to do like some of our politicians—"go back to first principles"—the nature of the bee, and take a new start. Remove this erroneous impression respecting expense, that now extends through all the intermediate ranks, from the patent-buyer to the patent-granter, the whole of whom seem to know about as much of the *real* nature of the bee as Sambo did of the telegraph.

M. QUIMBY.

Palatine Church, N. Y.

For the American Agriculturist.

REMINISCENCES OF WINTER EVENINGS.

Thirty or forty years ago, the means of intellectual improvement for the young were far less than they now are. Newspapers and periodicals were less common. Lyceums and lectures were unknown. In the rural districts, there were very few amusements for young persons, during the long winter evenings. There was but little social intercourse among farmers' boys. If they could be spared to attend school three months in a year, their services were needed, morning and evening to take care of the cattle, chop wood, build fires, bring water, and attend to other duties incident to their condition. But after the services of the day were ended, there was a long evening unoccupied. Books were few. There was no stimulus to the young mind to awaken a love of letters. A single newspaper during the week, scarcely attracted the notice of the children, who knew nothing of political matters and cared less. It was a desideratum therefore to occupy the time of the younger members of the farmer's family and make their evenings profitable to them. My father had been an old schoolmaster. He loved books and wondered that his boys were so indifferent to those he provided. They were taken from the "Social Library," owned by a long list of proprietors, living in all parts of the town and kept near "the old meeting house," so that books might be exchanged on the Sabbath. This was deemed "a work of necessity and mercy," which might be performed on Sunday; and well it might be so considered, for most of the books treated of religious themes, and many of them were volumes of sermons. Occasionally an ancient work of history was found there. Such books had few charms for children.

Grieved at our own want of taste for literature, my father resolved himself into a "committee of ways and means" to occupy the time of the younger members of the family, during stormy weather and winter evenings. He, therefore, established a little school in which various exercises were introduced to enliven our heavy hours. There were six of us to be taught. A little emulation was excited. Sometimes a spelling school was set up. Time was given for preparation and then the hour of trial came. No reward but commendation was bestowed. Sometimes reading, or music, or writing, was substituted. Often general questions were propounded and each was eager to solve them all. In geography, the capitals and boundaries of countries were called for; or the animal vegetable and mineral productions of a particular State or Kingdom were proposed as a lesson. Interesting events from the weekly paper were added by the teacher. Sometimes the great bible, having a concord-

ance bound up with it, was called for, and each child with a small bible was directed to find every passage that contained a particular word. All looked, at the same time, for a single reference. The first that found it was commended for his familiarity with the order of the books in the Bible. The practice was a good one. We early became acquainted with the different portions of the scriptures and knew where important passages were found. Sometimes the references were to be committed to memory, and the lesson consisted in a simultaneous recitation of all the passages referring to a particular subject. At other times, the order of the books, the number of chapters in each, and the character of Scripture worthies were assigned as our evening study. Again, arithmetic would be substituted. Interesting problems were solved; compound numbers were written with their appropriate signs and then variously combined. Sometimes notes, orders, accounts, or receipts were required to be written on the slate, and the use of capitals and punctuation were illustrated. Another variety of employment consisted in the recitation of poetry. If no other book was at hand, Watts furnished an unfailing supply for all present. Father, mother and children all vied with each other in reciting these almost divine lyrics. All these exercises were useful. They occupied our attention and stored our minds with useful thoughts. With the multiplication of books and journals, such exercises might be indefinitely varied and serve to promote both the intelligence and happiness of families. How much better are such diversions, than games of chance or noisy amusements. Try it, my friends, and share the toils of study and the joys of acquisition with your children.

BAD EFFECTS OF GRASS ON COLTS.

When horses are turned out to grass in the spring of the year, the succulent nature of the food causes them to purge, often to a great extent; this is considered by many persons a most desirable event—a great misconception. The herbage is overcharged with sap and moisture, of a crude, acrimonious nature, to such an extent that all cannot be taken up by the organs destined for the secretion of urine, or by the absorbant vessels of the body; the superflous fluid therefore passes off through the intestines with the indigestible particles of food, and thus the watery fæces are thrown off. Flatulent colic or gripes is a frequent attendant. The system is deranged; but the mischief does not terminate here. If the purging is continued, a constitutional relaxation of the bowels is established, very debilitating to the animal, and often difficult to control. I am so decidedly opposed to an unrestricted allowance of luxurient grass to horses at any age, that nothing could induce me to give it to them. After the second year, hay should form a considerable portion of the daily food in summer, to every animal intended for hunting or riding.

If a horse is supported entirely upon the grass which he collects in a rich pasture field, or upon that which may be cut and carried to him in his paddock, he must consume a much greater bulk than of hay in an equivalent time, to afford nourishment to the system. Grass being very full of sap and moisture, it is very rapidly digested, consequently the horse must be continually eating it. This distends the stomach and the bowels, and the faculty of digestion is impaired; for the digestive powers require rest as well as other organs of the body, if they are to be preserved in perfect condition. By the custom of grazing, the muscular system is enfeebled, and fat is substituted. This may escape the notice of superficial observers, who do not mark the distinction between the appearance of a fat and a muscular animal; who conceive, so that the bones are covered, and the points are rounded, all that is requisite has been attained. But that is a very fallacious impression. Let any person who is skeptical on this point ride a horse in the summer who has just been taken out of a grass field, along with another kept on hay and corn, at the moderate rate of seven or eight miles in the hour; the grass-fed horse will sweat profusely, while the other will be perfectly cool and dry. This proves that the system of the one eating grass overabounds with fat and those portions of the blood which are destined to form that deposit.

Those who advocate grazing will no doubt exclaim, "Oh! this is a test of condition, which is not required in young and growing animals." I beg to state that it is highly important, if the acme of condition is to be attained by animals of mature age; that the growth and gradual development of their frames should be composed of those healthy and vigorous elements upon which the structure of future condition can be raised. Animal substances are to a very great extent subservient to the nature and quality of the food with which the individuals are nourished. I believe farmers would find it much to their advantage if they were to consider this subject with reference to feeding cattle and sheep, so that they might select those kinds of food which abound with properties more conducive to the production of flesh than fat. There is no kind of food which the horse consumes which has not a tendency to deposit fat. It is a substance which must exist to a certain extent; but as it is muscular power, not a predisposition to adipose rotundity, which enhances the value of the animal, the reasons are obvious what guide should be taken in the selection of food.

I have on a former occasion hinted the propriety of bruising the oats, and I will now state my reasons for doing so. The first I will mention is economy. Three bushels of oats which have undergone that process are equivalent to four which have not, and the animals which consume them derive greater benefit. Various schemes are adopted to induce horses to masticate their corn, all of which are ineffectual. Scattering them thinly over the surface of a spacious manger, mixing a handful of cut hay or straw with each feed, and such like devices, will not cajole the animal to the performance of mastication. A horse that is disposed to bolt his corn, however carefully it may be spread along his manger, will soon learn to drive it into a heap with his nose, and collect as much with his lips as he thinks fit before he begins to masticate. Whatever food enters the stomach of any animal, and passes away in an undigested form, may be considered as so much dross or extraneous matter, which, not having afforded nutriment, is prejudicial to the creature which consumed it. A mistaken notion of economy is often the incentive to turning horses out in summer, to be entirely dependent upon grass for their support. A few remarks will surely dispel that error. Twenty-two bushels of oats—allowing one bushel per week from the 15th of May to the 16th of October—may be as the produce of half an acre of land, and half a tun of hay that of another half-acre, although a tun and a half per acre is not more than an average crop. It requires at least an acre of grass land to support a horse during the period above named.—*Mark Lane Express.*

Appropriate Name.—Most of the marriage ceremonies in Appleton, Wisconsin, are performed by the Rev. Mr. Yocum.

HOP GROWING.

(Continued from page 27.)

Setting the Poles.—The proper length of poles requires much judgement. The vines themselves indicate sufficiently how long a pole to use. The poles are of various lengths; and if the vines in a hill are very large and thrifty, they will need a longer pole than if they are smaller and more feeble. The quality of the land is also some indication, as well as the quantity of manure used. If the land is very rich, it will produce a much more luxuriant growth than if of a poorer quality. The expense for poles is a large item in the original outlay for hop growing. It will be seen, from the opinions of the writer of the communication before quoted, that the method of poling is a matter of considerable consequence. The English growers often use a much larger number to the acre than experienced growers with us. It is very common in the Kent and Sussex hop plantations to see as many as two thousand five hundred or three thousand poles to the acre. Sixteen or eighteen feet is as long as it is thought best to use them by many English growers, and it is not uncommon to see them from ten to twele, or fourteen, feet; and the reason given for using short poles is, that the use of poles longer than the natural growth of the plant coaxes it too high, and stimulates it beyond its strength, and causes a feebleness in its roots the next year; while, if the poles used are found in summer to be too short, the tops of the vines may be supported by others. The usual time for poling hops with us is in May; for plants grown from cuttings, the second year of their growth; and for plants grown from seed, the third year. The poles, two in a hill, eighteen inches apart, are usually inclined a little outwards, at the top, and towards the south, in order to give the greatest freedom of circulation to the air, secure greater sunlight, and a greater chance for the vines to swing free from the poles; and unless this inclination is given the tops of the poles, the vines are said to "browse;" that is, they become matted together and injured, and are much more liable to blast. And the same objection exists to the use of more than two poles to a hill; the vines are more apt to "browse." Cedar, hemlock, spruce, ash, chestnut, maple, pine, willow, and other kinds of poles are often used, and in some locations in this State the birch is not uncommon in hop grounds. This latter is considered bad in England. In many localities birch poles are cheaper, and far more easily procured; though, for lightness, beauty, and durability, the cedar or the hemlock are preferred by those who can procure them without too great expense. The American hop seems to prefer to cling to a white birch. The main objection to this wood is its rapid decay, making it unsafe to use it more than one year. Perhaps, on the whole, if the birch is not used and renewed every year, the spruce is the neatest and cheapest, considering its lightness and durability. It will last five or seven years, or even longer, and, when the bottom is decayed, may be cut off and used shorter. The number to the acre will of course depend upon the number of hills, which are usually at least from six to eight feet apart, making from sixteen to eighteen hundred poles to the acre. The farmer already quoted says: "The poles are worth $2 or $2 50 a hundred, ready for setting, and will cost, at sixteen hundred per acre, from $32 to $40. But, as good poles will last ten or twelve years, the expense per year will not be much increased."

After the poles are set in the manner indicated, in rows perfectly straight both ways, two to each hill, and inclined a little outward, and the vines are long enough, two or

more of the most thrifty stems should be selected and tied to each pole by a woolen yarn, or soft rushes—great care being taken to perform this operation at the proper time, and before they have become too hard and confirmed in their inclined position so as to be injured by slanting them up from the roots.

The English and French cultivators have adopted in some cases, by way of experiment, a system of espalier training, by which the vines run in a horizontal direction on a series of trellises five or six feet high. This is thought by some to avoid the great expense of poles, and also the liability to injury by high winds and storms to which long poles are subject. Some have also recommended trellises of iron wire in France, by it is thought that a fifth part of the expense for poles is saved; but, surrounded as most of our farmers are by abundant and suitable material on their own premises, it is not probable that any resort to such experiments will at present be necessary.

Careful cultivation after the hops are poled—that is, the second and subsequent years—is required to keep the ground free from weeds and grass; and during times of drouth, the more frequently the plow and the horse cultivator are used both ways the better. From what has been said, it will be evident that the plant comes to its most perfect development in a soil thoroughly tilled and pulverized. The hop requires frequent stirring of the soil in times of drouth more than many other crops. The plants are greatly invigorated by it. The soil is hoed up around the hills in June or July, and many cover the hills in winter either by plowing or by manure. Whether this is done or not, the hills are opened early in spring, and the large part of the last year's shoots, the running roots, cut off with a sharp knife to within an inch or two of the stem. But the old bine, or the tap root, which descends vertically into the soil, is not touched. The hills are opened by back-furrowing from each row of hills both ways. This brings all the soil into the spaces between the rows. Before the first hoeing the back furrows are split with the plow, which turns the earth back upon the hills. After the hill are opened by back-furrowing, they are covered with a shovelful or two of compost; or, in want of this, the finest and richest soil will be found useful.

It has already been seen that the hop vines are frequently gathered up and burned on the ground in the winter or spring. This may be done, and the ashes are of great value to the succeeding crop; but perhaps one of the most valuable manures, as well as the cheapest, is made of the vines, gathered into a heap, and left to decompose and form a rich black compost, to be applied in the spring in the manner indicated for other manure. This use of the vines has been too much neglected. Not only accurate experiment, but every principle of agricultural chemistry, shows at once how important this hop-vine manure is; for the vine contains in a concentrated form almost every constituent which it has taken from the soil; and those parts which are taken away in the seeds and strobiles of the plant can be abundantly supplied by composting these vines, chopped up, through the winter with barnyard manure, woollen rags, fish, or other nitrogenous substances. In this manner the land is not only restored to the condition in which it was before the crop was taken away, but made as much richer as the amount of other manures used in the compost exceeds the amount carried off in the seeds and fruit of the plant.

As soon as the shoots are of sufficient length the poling is commenced, as has been said, and the vines are tied to the poles. The shoots not tied to the poles are, as already indicated, buried up in hoeing, and this whether they are wanted to form layers or not, for otherwise they would shut out the light and heat from the vines.—*C. L. Flint's Second Annual Report to the Massachusetts Board of Agriculture.*

(To be Continued.)

MATERIALS IN THEIR INVISIBLE STATE.

If a piece of silver be put into nitric acid, a clear and colorless liquid, it is rapidly dissolved, and vanishes from sight. The solution of silver may be mixed with water, and to appearance, no effect whatever is produced; thus in a pail of water we dissolve and render invisible more than ten pounds worth of silver, not a particle of which can be seen. Not only silver, lead, and iron, but every other metal can be treated in the same way, with similar results. When charcoal is burned, when candles are burned, when paper is burned, these substances all disappear, and become invisible. In fact, every material which is visible can, by certain treatment, be rendered invisible. Matter which in one condition is perfectly opaque, and will not admit the least ray of light to pass through it, will, in another form, become quite transparent. The cause of this wonderful effect of the condition of matter is utterly inexplicable. Philosophers do not even broach theories upon the subject, much less do they endeavor to explain it. The substances dissolved in water or burned in the air, are not, however, destroyed or lost; by certain well-known means they can be recovered, and again be rendered visible—some in exactly the same state as they were before their invisibility; others, though not in the same state, can be shown in their elementary condition; and thus it can be proved, that matter having once existed, never ceases to exist, although it can change its condition like the caterpillar, which becomes a chrysalis, and then a gorgeous butterfly. If a pailfull of the solution of silver be cast into the sea, it is apparently lost by its dispersion in the mighty ocean; but it nevertheless continues to exist. So when a bushel of charcoal is burned in a stove it disappears in consequence of the gas produced being mixed with the vast atmosphere; but yet the charcoal is still in the air. On the brightest and sunniest day, when every object can be distinctly seen above the horizon, hundreds of tuns of charcoal in an invisible condition pervade the air. Glass is a beautiful illustration of the transparency of a compound, which in truth is nothing but a mixture of the rust of three metals. This power of matter to change its conditions from solid opacity to limpid transparency, causes some rather puzzling phenomena. Substances increase in weight without any apparent cause; for instance, a plant goes on increasing in weight a hundred-fold for every atom that is missing from the earth in which it is growing. Now the simple explanation of this is that the leaves of plants have the power of withdrawing the invisible charcoal from the atmosphere, and restoring it to its visible state in some shape or other. The lungs of animals and a smokeless furnace change matter from its visible to its invisible state. The gills of fishes and the leaves of plants reverse this operation, rendering invisible or gaseous matter visible. Thus the balance in nature is maintained, although the continual change has been going on long prior to the creation of the "extinct animals." SEPTIMUS PIESSE.

Scientific American.

Geologically speaking, says Hood, the rock upon which hard drinkers split, is *quarts*.

Horticultural Department.

THE HORTICULTURIST FOR MARCH.

The leader, this month, is upon Pomological societies and their influence, and contains some historical facts that should be put upon record in all journals that take note of the progress of this art. The first general meeting of fruit-growers was held at Buffalo, in the month of September, 1848, under the auspices of the New-York State Agricultural Society, of which Lewis F. Allen, Esq., of Buffalo, was then President. This gentleman was one of the principal movers in the matter, and participated actively in the proceedings of that meeting. Delegates were present from fifteen of the States, and from the Canadas; large collections of fruit were presented; and the discussions continued three days. In the following month, the "American Pomological Congress" assembled at New-York, under the auspices of the American Institute. The display of fruits was magnificent, and the meeting highly satisfactory.

The next year, the Buffalo organization met at Syracuse, and adopted the title, "North American Pomological Society." At this meeting, overtures were made to the American Pomological Congress, for a union of the two societies, which were accepted, and in the following month the union was consummated at New-York, under the name of the American Pomological Society. This society has held five sessions; two in New-York, one in Cincinnati, one in Philadelphia, and one in Boston; and the next will be held in Rochester, in 1856. There is not at this time in the world an organization of this kind so efficient, and that extends its influence over so wide a range of territory, as this. It has its committees, and gathers its reports from the most northern limits of the United States to the shores of the Pacific.

The local societies that have been formed in many parts of the country will be efficient aids to the national society. The information, which has been gathered in these societies, and which finds its way into the reports of the national society, is of great value to all classes of cultivators. Though the discussions have, thus far, been principally confined to the best varieties of fruits, this is a point of prime importance to all who are planting orchards, and making selections for garden cultivation. A list of the most popular varieties throughout the country concludes the article. There are 36 varieties of the apple, 49 of the pear, 25 of the peach, 20 of the plum, 19 of the cherry, 4 of the apricot, 4 of the grape, 5 of the raspberry, and 9 of the strawberry.

Ten pages, or more than a fifth part of the whole magazine, are devoted to the biography of the Hon. M. P. Wilder, his private and public life, his efforts in behalf of horticulture, extracts from his speeches, fine passages, &c. Whether it is substantially the same that has just appeared in Hunt's Merchant's Magazine or not, we have not compared critically to see, but presume it is from a notice that we saw in Hunt's. It is

written in the eulogistic style of a political admirer, and were it in a political paper or pamphlet, we should think that some indiscreet friend of his had put him upon the track for the next Presidential campaign. But as it is here in this journal, we can only attribute it to an error in judgement, in discussing the genus homo, where some horticultural genus had been a little more appropriate. The engraving which accompanies this biography is exceedingly fine and life-like, and will recall very vividly to all his friends, the presiding genius of the last meeting of the American Pomological Society. This is announced as the first of a series of sketches of distinguished pomologists. We trust sketches rather than biographies will be given. Biographies of fine fruits, and their illustrations, are the proper illuminations of the pages of the leading horticultural journal of the country. Thomas Hogg, of Yorkville, is announced to appear next, with a portrait. Please let the life be razed, Mr. Editor.

There is an article on Daisy Chrisanthemums, to accompany a very beautiful boquet of eight varieties, taken from a collection of sixty sorts. These are much cultivated in England and France, and are growing in favor with us.

B. Munn has an article on evergreen shrubs. Though the materials are rather meager, he thinks the artist who is familiar with his subject can, with them, create much of picturesqe, or of graceful beauty, even with the winter scenery of a country residence. He fears the European Holly will always be scarce, as there are few situations in which it will succeed. But the American, which is so very beautiful, is entirely overlooked. Though it can easily be raised by the thousands from seeds picked up in the woods, it is rare to find this shrub at our nurseries. The Rhododendrons and Kalmias of our own woods may be introduced with good effect. Many of the hybrid varieties of Rhododendron, which have been originated in Europe of late years, may be found eligible for ornamental purposes. There is hope also, that the varieties from the Himalaya, introduced by Dr. Hooker, may prove hardy in our climate.

A Yankee subscriber has a chapter on the beauty of neglected things, which is one of the most sprightly articles of the number. He touches that poor, commonplace evergreen, the Red Cedar (Juniperus Virginiana), and really makes quite a lion of it. It seeks the driest, and most sterile soils along our roadsides, and in our neglected pasture-fields, clothing the bleakest aspects, as in charity, with its mantle of green. But though partial to granite hill-tops, and barren fields, no tree will show quicker the results of generous culture. It is beautiful as a *single* tree. It seems to sport from seed into almost innumerable varieties of every habit of growth, and every shade of green; some throw out long and sparsely-foliaged branches at stiff right angles with the trunk; some have the loose and airy appearance of the hemlock, that queen of evergreens; and others are as closely conical as an arbor vitæ. Their shades of color vary as their forms, from the liveliest green, to the most somber mixture of that color and blackishness. We have often noticed this sporting of the cedar in its native localities. As a hedge or screen it is equal to almost any of its fellows. He speaks from experience, having thoroughly tried it. Its great hardiness and thrifty growth insure success, if the least care is used in its transplantation. If the plants are set about a foot or eighteen inches apart in a continuous line, and suffered to grow untouched by the shears, they will in a few years form an impervious and picturesque screen, whose beauty is exceeded by few evergreens. But it bears trimming as well as the buckthorn, and you may make of it as trim and beautiful a verdant wall as you may desire. It loses somewhat of its brightness in the winter, but not so much as the arbor vitæ; and withal, it is not that dead, yellowish, Russia-leather look which belongs to the latter, but rather a sober and becoming livery. It has an evanescent and borrowed beauty, for which it is well worth cultivating a single specimen, if no more. When the first still snow storm of winter comes, its dark branches become sprinkled over with a fleecy burden, until they bend beneath it, and the tree looks like a fairy chandelier, prepared for Titania's revels.

This now will be right good news to all lovers of home-bred trees, and Sam is a goose if he does not henceforth take to Red Cedar for his evergreen hedges. It is particularly good news to those who live along the shore, for this plant seems to love the smell of the sea breeze, and is found in greatest abundance near tide-water. It is visible all along the shores of Long Island Sound, even to the water's edge. We have a native in our garden that extends its roots into soil strongly impregnated with salt. We have noticed that where this tree stands alone and is left to nature, it throws out its branches as near the ground as a Norway spruce. If any of our readers have experience with Red Cedar as a hedge plant, we shall be glad to hear from them.

William Saunders, of Germantown, Pa., has an article on grape mildew. He thinks the mildew is the result of disease in the vine, and has long been persuaded that it may be prevented by judicious airing. He rejects the theory that it is caused by dampness.

Mr. Chorlton has a very full and excellent article on the tomato. They may be improved in shape and flavor to very great excellence. They yield to the law of progress as readily as any plant that man has taken under his care. Pick the very best smoothest samples for seed each year. We have had samples of this vegetable of two pounds weight, and should hardly consider a further enlargement any improvement. We think with Mr. Chorlton, that the flavor improves with the size. They are easily preserved in tin cans, cooked a little and seasoned, and then sealed tight, so that any housekeeper may easily have them, the year round, with a little care.

"My life in the Country," is continued, and some good hints to house-builders are dropped by the way. First determine the rooms you want, and build your house to suit the rooms. Never build a house in a hurry, or you will repent at your leisure. Don't think you can build a large house, for a small price. Arrange every detail before you begin. Get estimates of cost from several builders, and rest assured that you can not build it for any thing less.

In the Editor's Table, fears are expressed, that the severity of the winter has been fatal to the fruit crop for 1855. The peaches are gone at Rochester; not only are the fruit buds killed, but he fears the trees themselves are frozen to death down to the very roots. In cutting through the bark, he finds the wood quite discolored, and to all appearance completely disorganized. We have just had the curiosity to examine our own peach buds, and find very few of them discolored at all, which leads us to hope, that no very serious injury has been done to the orchards along the sea board, where the thermometer did not sink so low, by some twelve or fifteen degrees, as at Rochester.

An imposition is noticed: a man selling the *Northern Muscadine* grape in Ohio, for three dollars a plant, an article not worth planting. It is not quite time for the usual advertisements of the Charter Oak grape to come out, at 2, 3, and 5 dollars a plant; but they are sure to come, and the green ones who do not take the papers are sure to buy, and repent of it at there leisure.

Lucy Fitch's Prolific Strawberry, a new western seedling, is noticed, and in the advertising department is offered for sale. It is a pistillate plant, and appears to be a cross between the Alpine and Hovey's seedling. It continues in bearing much longer than Hovey's seedling. We do not see that it has been approved by any Horticultural Society, and we doubt the propriety of *purchasing* any fruit, that has not the approbation of some responsible body of fruit-growers. It may do very well pecuniarily to sell it. Horticultural Societies are a protection against humbugs.

Lime refuse from the gas works is pronounced worthless for a manure. We should like to know the evidence on which this opinion is based. A large per cent of it is still caustic lime, and we have never seen any evidence, that it would not answer to decompose peat and coarse vegetable matter as well as other lime. If we recollect rightly, the late Professor Norton recommends it for this purpose. It is the cheapest source of lime accessible to those who live near our large cities. A farmer near us uses it in large quantities, and we have never heard that it was not satisfactory in its action. If any of our readers have had experience in its use, we should like to have their opinions, and the reason for them.

High culture of dwarf pears, is a good top dressing of three or four inches deep of compost every autumn, and a light mulching of decayed leaves, or some other such substance, during summer. To this, add regular and judicious pruning, and your dwarf pears will answer all reasonable expectations, if not

far exceed them. They must have right culture, to be successful, and profitable.

An ambition for a few trees, brought to the greatest thrift and productiveness, is far more laudable than a mania to have all the varieties in the market. Make the most of the trees you already have, before you purchase more, if you are an amateur. Capital laid out on these will save the purchase of many to replace those that die of neglect.

TREES.

BY ALFRED B. STREET.

Whether pluming the mountain, edging the lake, eye-lashing the stream, roofing the waterfall, sprinkling the meadow, burying the homestead, or darkening leagues of hill, plain and valley, trees have always "haunted me like a passion." Let me summon a few of them, prime, favorites and familiar to the American forest.

The aspen—what soft, silver-grey tints on its leaves, how smooth its mottled bark, its whole shape how delicate and sensitive! you may be sitting on the homestead lawn some summer noon, the trees all motionless, and the hot air trembling over the surface of the unstirred grass. Suddenly you will hear a fluttering like the unloosing of a rapid brook, and looking whence comes the sound, you will see the aspen shaking as if falling to pieces, or the leaves were little wings striving to fly. All this time the broad leaf of the maple close by does not even lift its pointed edges. This soft murmur sends a coolness through the sultry atmosphere; but while your ear is drinking the music, and your eye is filled with the tumultuous dancing, instantly both cease as if the tree were stricken with a palsy, and the quiet leaves flash back the sunshine like so many fairy mirrors.

Next the elm. How noble the lift and drooping of its branches! With such graceful downward curves on either side, it has the shape of the Greek vase. Such lavish foliage also, running down the trunk to the very roots, as if a rich vine were wreathed round it! And what frame-works these branches shape, breaking the landscape beyond into half-oval scenes which look through the chiaroscuro as if beheld through slightly shaded glass. And how finely the elm leans over the brook—its native place—turning the water into ebony, and forming a shelter for the cattle from the heat. It is scattered, too, over the meadow, making shady nooks for the mowers at their noontide meal, shadowing the farmer's gate and mantling his homestead in an affluence of green.

Then the maple. What a splendid cupola of leaves it builds up in the sky—an almost complete canopy from the summer shower. It reddens brilliantly when the bluebird tells us spring has come, and, a few days later, its drooped fringes gleam in the fresh grass like flakes of fire. And in autumn, too, its crimson is so rich, one might term it the Blush of the Wood.

And the beech. How cheerfully its snow-spotted trunk looks in the deep woods, how fresh the green of its regularly scolloped leaves! At spring-tide the tips of its sprays feather out in the glossiest and most delicate cream-satin, amid which the young leaf glows like a speck of emerald. And in autumn what rich clusters of fruit! The pattering of the brown, three-cornered beech-nut upon the dead leaves, is constant in the hazy, purple days of an Indian summer, and makes a sweet music, almost continuous as the dripping of a rill, in the mournful forest.

The birch is a great favorite of mine. It reminds me of the whistles of my boyhood. Its fragrant bark—what delight it was to wrench it from the silver wood for the shrill music I delighted in, particularly by the hearthstone of my home.

"Conscience!" my aunt Katy used to gesticulate, holding her ears; "is that whistling coming again? John, do, *do* stop."

And when came a shriller blast:

"John, you little torment! if you don't stop I'll box your ears!"

What splendid tassels the birch hangs out at the bidding of April—tassels that Indian Sachems were proud to wear at the most honored feasts of their nation.

And into such a rich gold is it transformed by October, a light is almost shed of its own within the sylvan recesses. The speckled bark of the black birch is glossy and bright, but give me the beauty of the white birch's coat. How like a shaft of ivory it gleams in the daylight woods—how the flame of moonlight kindles it into columned snow.

Did you ever, while wandering in the forest about the first of June, have your eyes dazzled at a distance with what you supposed to be a tree laden with snow? It was the dogwood. Glittering in its white blossoms, every one spread over a broad leaf of the brightest verdure, pointed gauze upon emerald, there stands the pretty tree like a bride. The shad-bush and cherry, have dropped their white honors a month before, but the dogwood keeps company with the basswood and locust in brightening the last days of spring with its floral beauty. Up into the soft blue it lifts its wreathed crown, for it gathers its richest show of bloom on its head, and makes the forest light as with silver chandeliers.

While admiring the dogwood, an odor of exquisite sweetness may salute you; and, if at all conversant in tree knowledge, you will know the censor dispensing this fragrance. But you will travel some distance, and do it as the hound tracks the deer, by scent, for the perfume fills the forest long before the tree catches the eye. At length you see it—the basswood—clustered with yellow blossoms, golden bells, pouring out such strong, delicious fragrance, you realize the idea of Shelley:

> "And the hyacinth purple, and white and blue,
> Which flung from its bells a sweet peal anew
> Of music so delicate, soft and intense,
> It was felt like an odor within the sense."

And the deep hum, too, about it—an atmosphere of sound—the festival of the bees surrounding the chalices so brimmed with honey.

I have mentioned the flowers of the locust and the chestnut in connection with the basswood. Delicate pearl does the former hang out amid the vivid green of its beautiful leaves and sweet is that pearl as the lips of that maiden you love.

And the chestnut, scattered thickly among its long, dark-green leaves are strings of pale gold blossoms, haunts also of the reveling bee. Does the school boy ever forget "the days that he went" truanting after the auburn fruit embedded in velvet within, but without protected by porcupines of husks. With what delight did the young good-for-nothings pelt down those yellow husks to be crushed open by indefatigable heels! Ah! the aurora of life—how bright! how merry!

Forever linked in the minds of those truants with the chestnut is the walnut. How the green smooth globes that insphere the fruit make the eyes of the young vagabonds dance. And how eagerly they mount to shake down those globes, each fracturing at the fall, and unloosing the round ivories that in turn imprison the golden meats.—*Knickerbocker Gallery.*

(Concluded next week.)

THE HYDRANGEA.

Although this must be admitted to be one of the most showy plants we have, it has certainly been very much neglected of late years. It is, however, still prized by a few, who find it particularly useful for greenhouse and conservatory decoration, displaying its enormous heads of pink and blue flowers in abundance, and remaining a long time in perfection. The following method of treatment, being pursued, will enable all who practice it to have *large heads* of blossom from plants even in small pots. If cuttings are taken off in August, and potted in a mixture of leaf-mold, loam, and sand, in a well-drained pot, and be placed in an old cucumber or melon frame, they will root freely, and should be potted into four-inch pots as soon as they have become sufficiently rooted. The plants should be kept to one leader, the top bud of which should not be pinched out, but all lateral or side shoots be removed as soon as they appear. When sufficiently established in their pots, move them to the greenhouse, where they should be wintered. Early in spring shift them into five or six-inch pots, as may best suit your convenience, and as soon as they have commenced growth liberally supply them with water, using the syringe freely at all times. Perhaps the most convenient place for them at this season is a vinery, which I find suits them well, and brings them on gently until the blossoms make their appearance. Water at this stage must on no account be neglected. If large specimen plants are required, they should be grown another season, when they will form a fine bush and produce many heads of blossoms, although inferior in size to those on plants kept to one leader. I have grown the same plants for years; in this way they have made huge specimens, and amply repaid me for my trouble; but if small plants with large heads are preferred, they should be grown from cuttings every season. I have also struck cuttings in February, and grown them on until the following season, using a slight bottom-heat, and disbudding the useless eyes; such plants have produced enormous heads, superior in size to those struck in August, but then the plants are longer in hand, which, in many cases, is a consideration. The soil best suited for their culture is equal portions of cow-dung, leaf-mold, fibrous loam, peat, and sand, well mixed in a rough state. The pots should be thoroughly drained, and, during the blooming season, the plants will be benefitted by being placed in a pan of water. Manure-water may be used freely while the plants are in bloom. In order to change them from pink to blues of different shades, put them in Norwood loam, or common red sand; potting in peat and wattering with alum-water will also produce the same effect; but the two former kinds of material are the best. If planted on well-drained ground, aud slightly protected in winter, the Hydrangea will form an ornament in the flower garden such as few can equal; but it must be liberally supplied with water during the blooming season.—*Floricultural Cabinet.*

A Short Sermon on Manliness.—Learn from the earliest days to inure your principles against the peril of ridicule. You can no more exercise your reason if you live in the constant dread of laughter, than you can enjoy your life if you are in constant fear of death. If you think it right to differ from the times, and to make a point of morals, do it. however antiquated, however pedantic, I may appear; do it not for insolence, but seriously—as a man who wore a soul of his own in his bosom, and did not wait till it was breathed into him by the breath of fashion.—*Sydney Smith.*

American Agriculturist.

New-York, Thursday, March 29.

☞ *This paper is never sent where it is not considered paid for—and is in all cases stopped when the subscription runs out.*

We occasionally send a number to persons who are not subscribers. This is sometimes done as a compliment, and in other cases to invite examination. Those receiving such numbers are requested to look them over, and if convenient show them to a neighbor.

Answer to Inquiries.—Questions of various kinds have been received with no names accompanying. These we do not reply to, from certain considerations not necessary to repeat. The name of a writer will always be withheld from a published question, or communication, when it is requested.

DISSOLVING BONES.

We have before treated this subject somewhat at length (see vol. xi, page 113, and vol. xii, page 56), but large editions of the numbers containing those articles have been exhausted by the calls for them, and every week brings inquiries from new subscribers. To answer these we will again briefly describe the process.

Where a good mill for grinding bones is near at hand, it is best to have them finely ground, and they may then be applied directly to the soil; though in most cases we should prefer dissolving even the bone-dust in sulphuric acid (oil of vitriol). To do this, dilute the acid with two or three times its *bulk* of water, and moisten the ground bones with it. This can be done best in a half barrel, tub, or trough. Shovel over the mass thoroughly, so that every particle may be brought in contact with the liquid. The mixing may be completed upon a floor, or on a hard ground surface—under a shed or other cover to keep off the rain. When the mixing is *thoroughly* accomplished, put the whole in a heap, and let it lie for a few days, and then treat it as described below.

Whole Bones.—In a majority of instances a bone-mill is not accessible. It is then necessary to resort to dissolving the whole bones. This is not a difficult process, *if sufficient time is taken.* The following method we have both practiced ourselves, and seen it repeatedly performed under our directions, with the best success:

Take any water-tight, wooden-hooped barrel or cask, and fill it one-third full or less with a mixture of sulphuric acid and water. The water should be put into the barrel first, or the acid undiluted would char and in a short time destroy the wood. The acid should be added in small quantities at a time, as a high degree of heat would be produced if it were all added at once. The water should constitute from two-thirds to three-fourths of the bulk of the liquid; that is, between two and three gallons of water for each gallon of acid to be used.

When the liquid is thus prepared, the bones may be put in and punched down with a stick, until they rise some distance above the liquid. The closer the bones are packed in, the greater the economy of time, as more of them will be at once exposed to the action of the liquid. It is better to break the bones into small pieces with a hammer or sledge, unless you have several months before you for completing the process.

Let the mass stand for a few weeks, frequently working it over with a stirring stick. As fast as the bones sink down into the liquid, more of them should be added. The liquid will often dissolve two or three times its bulk of bones. When the liquid ceases to act longer upon the bones to diminish their bulk, we may conclude that its strength is exhausted; and it may then be poured off for use, and more fresh liquid be added to the bones remaining, and the process be continued in the same vessel. As the dissolved bones will not deteriorate if kept for years, it is economical to use the same cask and add bones or acid as may be wanted. The barrel or cask should be examined occasionally, to see if there is danger of the hoops or bottom giving way, in which case the whole contents should be at once transferred to another vessel.

Using the Dissolved Bones.—To the liquid, or to the mass of ground bones, let there be added dry muck enough to render the whole so dry that it will readily crumble to powder. The more complete the mixing of these the better. The mixing can be done with a shovel, hoe, and garden rake. In the absence of muck, dry manure, or even dry soil of any kind may be used. The mixture may be added to the manure or compost heap if desirable. It will be all the more valuable if no more than two gallons of the liquid, or a peck of the ground bones, be mingled with a cart-load of muck or manure, though so large a proportion of the latter is not necessary.*

This compost may be spread over the land, and mixed with the surface soil by harrowing, and the whole then be plowed under; or it may be sown upon the surface, to be washed down by rain. In planted crops it may be put into the hill with the seed. If it has been well mixed with a large quantity of muck or other materials, there will be no danger of injury to the seed or plants from its direct application. If this has not been done, care should be taken to cover it with earth before dropping in the seed. This preparation is probably more valuable to the root crops—turnips, carrots, beets, &c., than to grains and grasses, though containing, as it does, large amounts of animal matter, derived from the unburned bones, it will be found valuable for any crop.

* If the liquid is poured off for use, before it has entirely ceased to act upon the bones, it contains some free acid, and we have formerly recommended a small quantity of unleached ashes to be added to neutralize this excess of acid; but as this may be improperly done by the inexperienced, we have ceased to advise this course. The acid can be entirely freed from any injurious effects by a free use of muck or other divisor.

To our Southern Readers—An Inquiry.—We have recently conversed with several intelligent gentlemen, whose observations have differed from our own in regard to the *vitality* of the "*Spanish Moss*," after the death of the tree supporting it. Will some one who has opportunity for carefully examining this subject give us the result of his observations? Does or does not the moss continue in growth after the sap ceases to circulate in the tree upon which it grows?

HOW WE KEEP OUR HENS.

Hen-house, in the appropriate sense of that word, we have none. We have no doubt of the utility of those structures, and that something very much better than our contrivance could be got up with a little leisure to plan it, and money to build with. But we have had eggs and chickens enough, for the last five years, to satisfy our editorial ambition, without the trouble of putting up a hen-house. Our barn stands on the south side of a hill, and under a part of it we have a cellar excavated, stoned and pointed with mortar. It makes a snug, warm room, about 20 feet by 10, opening to the south. A large ventilator communicates with the barn above, and the door is kept open at all times, except in snow storms and the coldest nights when the thermometer is in the neighborhood of zero. On such occasions, when Jack Frost is out in state, we close the door. On either side of the cellar there are large, long poles put up for roosts, three on a side, and at such heights from the ground that they are easily reached by the fowls, and that the droppings from the upper row of fowls fall clear of their neighbors below them. Underneath the roosts we keep a good supply of charcoal dust or muck, and in addition to this we make a constant use of plaster. As often as every morning, in mild weather, and every other morning in cold, we sprinkle a large shovelful upon the droppings. This keeps the air perfectly sweet, and absorbs the most of the ammonia. The olfactories are a very good meter for the necessary quantity of plaster, and the rule is to sprinkle as much and as often as you can detect any unpleasant odor. This is essential to the health of the fowls, and we have no doubt that more fowls die of bad air, from lack of attention, than from all other causes united. The manure made in this way is very powerful; not equal in value to guano, pound for pound, but much cheaper than guano at the cost of its manufacture. It forms a very handsome item in the annual profits of keeping fowls.

In the yard upon which the cellar opens, we have a large pile of refuse cabbages, not quite good enough for market, and a little too good for the compost heap. These are gathered late in the fall, when frozen, and covered with salt-hay or other refuse matter. They keep in a frozen state nearly all winter. The hens have constant access to them, and get all the green food they want. This, with the other attentions, keeps them in fine health. They have pounded oyster-shells both in the cellar and in the yard, and fresh water every day. The staple feed is Indian corn, raw, soaked, and in meal scalded This is varied with oats, and the sweepings of grain stores and screenings from the city

We should probably get some eggs without further effort, but to make success certain we give fish, two or three times a week. A small fish, caught in all our salt-water creeks and ditches, called the mummychaug, makes excellent feed for fowls. Fish offal from the market, or butcher's offal, would probably answer as well. Beginning the fowl season November 1st, with a flock of pullets hatched the preceding April, we have eggs, constantly and in abundance, through the coldest weather. The quantity increases after February, and in the three following months it rains eggs on our hill, and the thunder of Shanghai eloquence wakes the echoes of every morning hour.

We keep, in their purity, White Dorkings, Buff Shanghais, and Chittagongs. The Asiatic fowls are the only reliable winter layers, and make early chickens for broiling, better than any variety we have tried. The cross of the Dorking with the Shanghai makes a very plump, fine-fleshed fowl for the table; and they are not bad layers. The Buff Dorking, made by this cross, is a very handsome, sprightly bird. With a stock of forty or fifty fowls we raise all the eggs and chickens used in a large family, and from a debit and credit kept for several years, it appears that each fowl pays about a dollar clear profit. No other investment on the premises pays so well.

HARROWING GRAIN.—We have often found great benefit in harrowing winter grain in the spring of the year, as soon as the ground is well settled and dry, more especially wheat somewhat winter killed. It stirs the earth, encourages tillering, and adds to the vigor of the growth of the plant. The harrow should be followed by the roller, so as to replace the roots of the plants which may be laid bare by the harrow, and crowd them into the earth. It is hardly necessary to add, that the harrow should be light, with short, fine teeth. Among the German population of this country, we have seen wooden-tooth harrows frequently made use of for this purpose; they asserting, that the teeth were not so liable to injure the plant. We believe that barley, oats, and all spring crops of grain may be harrowed to advantage, whenever the surface of the ground becomes somewhat hard and encrusted, which all clay soils are liable to after a hard rain. Harrowing the hemp crop under such circumstances, we were informed, in Kentucky, has been found highly beneficial.

LADIES REPOSITORY.—We have an utter aversion to that class of periodicals known as "ladies' magazines," filled as they generally are with *light*, trashy literature, love-stories, &c. It is an insult to the intelligent ladies of our country to present them such reading, as being adapted to their tastes or necessities. There are, however, exceptions to this wholesale denunciation, and among these exceptions we would place foremost the LADIES' REPOSITORY. We have been familiar with it for years, (it is now in its XVth volume,) and can heartily commend it as one of the very best magazines for the family circle. A high moral and intellectual tone characterizes its pure, interesting and instructive pages. Each number contains two fine original steel engravings, which are alone worth the price—$2 a year. Published monthly by Messrs. Carleton & Phillips, 200 Mulberry-st., New-York.

CHEMISTRY

FOR SMALL AND LARGE BOYS AND GIRLS.

CHAPTER X.

Oxygen—Symbol O—Atomic Weight 8.

81. We have now come to the description of one of the most important of all the simple or elementary bodies, Ox-y-gen. It is important, because it is very abundant, constituting, as it does, one half or more of the weight of the whole earth. Eight pounds in every nine of all the water of the ocean, the seas, lakes, rivers, &c., is oxygen. We can name but very few substances, mineral, vegetable, or animal, of which oxygen does not form a considerable portion. Perfectly dry common salt is one of the few abundant mineral substances, whice does not contain oxygen. It is owing to the oxygen of the air that substances burn or decay. It is this element in the air which supports life, and keeps up the renovation of our bodies; and this same element is also the cause of their speedy decay after death, and of their emaciation during life.

82. Oxygen was once thought to be the cause of all acidity or sourness, because it is found abundant in sour substances, such as vinegar, sulphuric acid (oil of vitriol), nitric acid (aqua fortis), &c., and on this account it received its name. *Oxy* means sharpness or sourness, and *gen* the producer of; that is, *oxy-gen* signifies sour-producer. You will remember (69) that *hydro-gen* signifies water-producer.

83. Oxygen is distinguished for its strong affinity, or liking, for nearly all the other elements; and though we find it abundant in the air and other gasses, it seldom exists alone. When set at liberty during the various changes in nature, it speedily unites with some other element to form a compound body. When not combined with any other element it takes a gas form, and is then much like air in its physical properties. It is, like air and hydrogen (69), transparent or colorless.

84. The oxygen in a jar containing 100 cubic inches (nearly 2 quarts), weighs about 34½ grains (34.29), while the same amount of air weighs about 31 grains (31.01). Oxygen gas is, then, about one-tenth heavier than common air.

85. *How to obtain Oxygen.*—To obtain hydrogen from water (HO), we put in zinc, which took away the oxygen and let the hydrogen go free; but we have not been able to find any substance which will take away the hydrogen and set the oxygen at liberty. The reason is, that oxygen has so much stronger affinity (or liking) for other substances than hydrogen has, that it will be the first to desert the water compound. The most convenient method of getting pure oxygen is, to take some solid substance containing a large amount of it, and then heat it so as to evaporate or drive off a part or the whole of its oxygen. There are many substances of this kind, such as red lead (Pb_3,O_4, or Pb,OOOO), saltpetre (KO,NO_5, or KO,-NOOOOO), chlorate of potash (KO,ClO_5, or KO,ClOOOOO), &c.

86. If we put some red lead (Pb_3,OOOO) on a shovel, and heat it to redness over the fire, one atom of oxygen will be driven off from every particle of the red lead, and we shall have a brown substance left called litharge (Pb,OOO). By placing an inverted tumbler over the heating mass of red lead, we should catch some of this oxygen gas, but it would be mingled with much air. If the red lead be put into a gun barrel, or in an iron bottle or flask, with a tube attached to the neck, we could then catch the oxygen as it escaped in a gas form from the tube. A similar change will take place if we put upon the shovel or in the iron bottle some chlorate of potash (KO,ClOOOOO), but in this case *all* the oxygen will be driven off and we shall have left a substance similar to common salt, called chloride of potassium (KCl); and from each particle of the chlorate of potash we shall get six atoms of oxygen in a pure gas form.

In the next chapter we will explain a simple process of getting oxygen for experiment.

THE WHEAT CROP AT THE WEST.

We learn, says the Chicago Tribune, from a gentleman who has traveled pretty extensively through the States of the northwest during the past six weeks, that the prospect of the wheat crop was never better. In Iowa, a large quantity has been sown, but so great is the emigration to that State, and so rapidly did it fill up last season, that a large portion of the surplus will be required for the new settlers there and in Kansas and Nebraska.

Throughout Illinois, it is represented that the crop never looked better. The high prices of the last few years, and the almost certainty that there will be but little abatement during the present year, have stimulated the farmers to sow to an extent beyond former precedent. And the same may be said of Wisconsin. The prospect there is, that the abundant crop of last year will be succeeded by one equally as good this.

We hear good reports, too, from Indiana and Michigan. On the whole, if no untoward event interposes between now and harvest, the northwest, which is in fact the granary of the Union, will turn out a surplus which will gladden the hearts of the breadless in our eastern cities.

There will be comparatively few men engaged in the construction of railroads in the west, during the present season, all the great lines being nearly completed. This will reduce the consumption of non-producers and cause a large amount of labor to return to agriculture—thus increasing our supply by the operation of two causes. So, we may look for an active fall business and a full supply of breadstuffs, unless blight, or mildew, or some other destroying agent, shall blast the fair prospects of the present.

A WORD TO YOUNG EMIGRANTS.

Notwithstanding the poets have so often sung of the ease and retirement of rural life, many of our youthful friends seem bent on seeking fortunes elsewhere. Perhaps some of our young readers are even now meditating a remove to the city; but before they discompose their wardrobe and arrange their linen with a view to departure, we beg leave to say one word.

There are some features of country life which, we confess, are rather allied to prose than poetry. In our boyhood, for instance, we saw little poetry in driving the cows to pasture before breakfast on frosty mornings. Neither did we feel particularly inspired while mowing away hay in the top of a barn where it was hot enough to parboil pumpkins—to say nothing of having both eyes and nose filled with dust and hay-seeds. Neither did it smack much of Pegasus to ride upon crooked rails with the sharp side turned upwards; and even now, we think it the most disagreeable equestrian exercise we ever went through with. Last of all, turning grindstone we thought absolutely prosy.

And yet the recollection of our early years is any thing but dull. We remember with what pleasure we used to wander over the fields, scale fences, leap across brooks, race through the woods, climb trees, and shout and sing to the echo of our own voices. How often have we clambered up rocks, and gathered mountain flowers, and rolled down stones, and laughed to hear them crack and crash among the trees, and break and bound and rattle, far below.

And then come recollections of sitting beside the old fire-place, big as a pair of barn-doors, with its trammels and andirons, and rows of apples strung across the hearth. And what a huge back-log there was, and how it sissed and simmered at the ends, and how the fire crackled and roared up the chimney. We affirm, with all the gravity of a theologian, there was more freedom in that old fire-place, than all the grates and furnaces of a modern mansion.

But now we live in "town," where we daily experience the beauties of contrast. Instead of the quiet and stillness of the country, we have the endless roar of carts and stages, and narrow side-walks instead of meadows, and in place of the beautiful birds, a solitary gull floating about East River, and in place of fragrant clover-fields and glorious apple-trees, a little back yard relieved with a grape-frame, and a dirty ailanthus, and a high board fence.

Belive it, boys, the country is the place for genuine happiness, though the city yields in point of omnibusses, men and mud.

ALL LETTERS TO BE PREPAID HEREAFTER.—The new postage law, which takes effect on and after April 1st, requires all letters to be *prepaid*—3 cents per half ounce for less than 3,000 miles, and 10 cents per half ounce for over that distance. This new regulation is a good one. As we understand the law, Postmasters are not allowed to forward any unpaid letters. Every person should take care that his communications do not lie in the home "Dead Letter Office," through his own carelessness or neglect to pay the postage.

GREAT SALES OF SHORT HORN CATTLE.—We would call attention to the advertisements of cattle sales in this weeks paper. That of Mr. Tanqueray, in England, for the 25th of April, is the most important advertised since the celebrated sale of Earl Ducie. It will be seen that many of the animals in his herd are the get of Duchess bulls, bred by the late Mr. Bates, or their direct descendants.

Col. Sherwood's, stock is principally of the Princess tribe, famous for their deep pedigrees, high quality, and fine points; and consequently highly valuable for crossing on other tribes not so high bred.

Mr. Tredwell and Mr. Cowles, also offer Short Horns and Devons for sale.

GRAPE VINES.—Attention is also directed to Dr. Underhill's, announcement of grape vines.

DEATH OF MR. SAMUEL ALLEN.

The sudden death of this excellent man occurred at Morristown, N. J., on the morning of the 21st inst., in his 78th year, after a brief illness of three days. Mr. Allen was the father of the publishers of this journal, and has long been known to our readers both as a contributor to its pages, and a zealous promoter of agricultural improvement.

Mr. Allen was born in Petersham, Worcester County, Massachusetts. The active period of his life was spent chiefly in commercial business. At about sixty years of age he retired, and from that time to his decease devoted himself to rural pursuits, which he ever loved.

He wrote frequently for the columns of our journal, with point and force. His manners were courteous, bland, and affectionate; his conversation refined and instructive; and to all he was a friend and a brother.

He was a religious man—ever acknowledging his deep responsibility to his Maker, and bending in humility daily at his altar.

For forty years he had been an officer of the Presbyterian Church—twelve of which were in connection with the associated Dutch Reformed Church in this City, with which his connection remained until his death.

He died, as he had lived, in the full confidence of salvation through his Redeemer, and in humble faith of a blessed immortality.

BEAUTIFUL OLD AGE.

Mrs. Sigourney, in her book "Past Meridian," just published, gives the following charming picture of contented and virtuous old age:

I once knew an aged couple, who for more than sixty years had dwelt in one home, and with one heart. Wealth was not theirs, nor the appliances of luxury, yet the plain house in which they had so long lived was their own. Humble in every appointment, that they might keep free from debt, they were respected by people in the highest positions, for it was felt that they set a right example in all things. Every little gift or token of remembrance from friends—and all who knew them were friends—awakened the fresh warmth of gratitude. Though their portion of this world's goods was small, benevolence, being inherent in their natures, found frequent expression. Always they had by them some book of slight expense, but of intrinsic value, to be given as a guide to the young, the ignorant, or the tempted. Cordials also, and simple medicines for debility, or incipient disease, they distributed to the poor—for they were skillful in extracting the spirit of health from herbs, and a part of the garden, cultivated by their own hands, was a dispensary. Kind, loving words had they for all—the fullness of their heart's content brimming over in bright drops, to refresh those around.

That venerable old man, and vigorous, his temples slightly silvered, when more than four score years had visited them, how freely flowed forth the melody of his leading voice, amid the sacred strains of public worship! His favorable tunes of Mear and Old Hundred, wedded to these simply sublime words,

"While shepherds watched their flock by night,"

and—

"Praise God, from whom all blessings flow,"

seem even now to fall sweetly, as they did upon my childish ear. These, and similar ancient harmonies, mingled with the devout prayers that morning and evening hallowed his home and its comforts; she, the loved partner of his days, being often sole auditor. Thus, in one censor, rose the praise, which every day seemed to deepen. God's goodness palled not on their spirits, because it had been long continued. They rejoiced that it was "new every morning, and fresh every evening."

By the clear wood-fire in winter, sat the aged wife, with serene brow, skillfully busy in preparation or repairs of garments, as perfect neatness and economy dictated; while, by the evening lamp, her bright knitting-needles moved with quickened zeal, as she remembered the poor child, or wasted invalid, in some cold apartment, for which they were to furnish a substantial covering.

In the later years of life, their childless abode was cheered by the presence of a young orphan relative. She grew under their shadow with great delight, conforming her pliant heart to their wishes, and to the pattern of their godly simplicity. When they were seated together, she read to them such books as they chose, and treasured their Christian counsel. Her voice in the morning was to them as the carol of the lark, and they seemed to live again a new life in her young life. She was to them "like the rose of Sharon and the lily of the valley."

Love for the sweet helplessness of unfolding years, seemed to increase with their own advancing age. Little children, who know by instinct where love is, would draw near them, and stand lamb-like at their side. Thus they passed on, until more than ninety years had been numbered to them. They were not weary of themselves, or of each other, or of this beautiful world. Neither was time weary of bringing them, letter by letter, the full alphabet of a serene happiness, and when extreme age added the Omega, they were well educated to begin the bliss of eternity.

THE machinery of that immense piece of mechanism, the great London clock, is thus described in the Foreign Quarterly:

The pendulum is 14 feet long, and the weight of the end of it is 100 pounds; the dial on the outside is regulated by a smaller one within; the length of the minute hand on the exterior dial is 8 feet, and the weight of each 75 pounds; the length of the four figures 2 feet 2½ inches; the bell is about 10 feet in diameter, and weighs 4½ tuns, and is

said to be audible a distance of twenty miles.

For the American Agriculturist.

THEORIES IN FARMING.

The indiscriminate censure of theory is absurd, as will readily appear from a slight consideration of the matter. Facts are like blocks of stone—of little use until they are brought together and built into some edifice. And we can not have the edifice—unless it be a "castle in the air"—without the stones. Now what is theory but a compact expression of the truth contained, or supposed to be contained, in facts? Every man capable of reasoning, acts upon theory, whether he will or no, though he may be as unconscious of it, and as much astonished at being informed of the fact, as was the sagacious gentleman in one of Molière's plays, who had been talking prose all his life without knowing it. The truth is, every person, whatever may be his business, is continually forming and often exploding theories in relation to it; and this is the way in which, so far as his experience and observation go, he arrives at the principles which guide him in his pursuit.

A farmer, for instance, applies lime to a certain field and obtains a greatly increased crop in consequence. He therefore somewhat hastily infers—*i. e.*, forms the theory—that it will be as useful on any other part of his farm; and, acting upon this theory, applies it to a portion which is already well supplied by nature with this constituent, or is poor in vegetable matter or otherwise unsuited for its use. Here he finds that his theory will not hold, and is led to investigate the conditions under which lime is useful or otherwise. And by extended experiment and reflection he may arrive at a theory which will guide him in the application of this substance.

Now, in the whole of this process, we have, first, the collection of facts; second, their embodiment in a theory, which, third, rises into a principle—if the supposed facts are true and sufficient in number, and if the reasoning founded on them is correct. The advantage, then, of theory, is this, that it brings together facts and furnishes a standpoint from which the truths they contain may be discerned. And if the theory is a false one, still it is not without its use, for next in importance to ascertaining what facts *do* teach, is discovering what they do *not* teach, in order that the pursuit of truth may be resumed in another direction. False theories may arise either from incorrect reasoning on real facts, or from correct reasoning on false facts; or, lastly, the reasoning and the facts may both be untrue. The first of these species is the least injurious, and not entirely useless, as we have just attempted to show; and, furthermore, when such a theory is swept away, the foundation remains for some more skillful architect to build upon. But the most prolific source of error in theory is the want of *a sufficient number* of facts—a difficulty which is peculiarly felt in the science of agriculture, where so many and such varied causes are influential in the production of a given effect.

The problems which agriculture presents do not, like those of mathematics or inorganic chemistry, depend for their solution upon a few well-known and fixed principles, but chemical, mechanical, and vital forces, as they act upon earth, air, and water, and through them on organized life, require to be taken into the account, and make it difficult to arrive at a correct conclusion. Agricultural science seems to be, at present, in about the same condition as the science of medicine. Both are richer in facts than in principles, and both have similar obstacles to contend with. That portion of the phenomena of nature which they attempt to investigate lies in a great degree out of sight, and those phenomena which are more exposed to observation are so numerous and complicated, and the share which each separate cause contributes to the general effect is so difficult to ascertain, that the slow progress of these sciences toward perfection is not surprising, nor is it wonderful that they should be taunted with fallacy and uncertainty.

But we are not to conclude from all this that little has been done for agriculture, as a science, nor that much more may not be done. The number of unknown facts is daily decreasing, and the facilities for communication of thought are now so numerous, that the experience of any one, however obscure, can easily be made known to thousands. And this is one office of an agricultural journal; to become a repository of facts as well as principles; by placing on record the one, to aid in furnishing materials for the other. Its motto might be, "Gather facts, and scatter principles." The influence of a well-conducted agricultural paper upon the farming community is almost indispensable to true progress. This influence may be slow in its workings, but it is sure to produce improvement after a time. Now and then an error is demolished; here and there a truth is brought to light; and established principles are illustrated and enforced. All this, going on as it does from week to week, from one year's end to another, furnishes the "line upon line, and precept upon precept," which are so necessary to overthrow error and lead to the adoption of correct views. A systematic teatise on agriculture may be read, to be laid aside, and its contents perhaps forgotten, while the weekly messenger, with its condensed instruction, and its reiterated words of truth, produces an effect greater than the former, as a continual dropping is more effectual to wear away the stone than the heaviest solitary shower. W.

SHORTENING-IN PEACH TREES.—I would recommend that you keep before your readers, the importance of heading-in the coming spring, all such peach trees as have ceased to produce strong and thrifty shoots. It is well known to every horticulturist, that the finest specimens of this fruit, are produced upon free growing branches, and on the contrary, when they become old, and stunted in growth, the fruit is not as large, nor as juicy, two qualities more desirable in the peach than some other kinds of fruit. There is no kind of fruit tree, the top of which can be so surely and so quickly renovated as the peach tree, and as no fruit is expected the coming season, a thorough *heading-in* of all peach trees that have ceased to make strong and thrifty shoots, will better prepare old orchards for a valuable crop the following year, than where this course is neglected.—G., in *Rural New-Yorker*.

NEW-HAVEN, February 28, 1855.

WHAT SHOULD BE THE OBJECTS AIMED AT BY AGRICULTURAL SOCIETIES.

We have received a printed copy of the able address of Mr. William Kelley, on retiring from the Presidency of the New-York State Agricultural Society—delivered at the Albany meeting, February 10, 1855. There are many valuable suggestions in this address. We give the following extract:

The diversified objects of these societies, seem not to be known nor appreciated as they should be. Many suppose their whole business is to get up an attractive annual exhibition and distribute premiums to the best specimens in every department there shown, but this, though important, is but a means to an end.

I was struck lately in reading the charter of the Royal Agricultural Society of England, with the enumeration of the means it employs to advance the great object for which it was constituted—allow me to read them to you.

1. To embody such information contained in agricultural publications and in other scientific works, as have been proved by practical experience to be useful to the cultivators of the soil.

2. To correspond with Agricultural, Horticultural and other scientific societies, and to select from such correspondence all information which, according to the opinion of the society, may be likely to lead to practical benefit in the cultivation of the soil.

3. To pay to the occupier of land or any other person, who shall undertake at the request of the society, to ascertain by any experiment how far such information leads to useful results in practice, a remuneration for any loss he may incur by so doing.

4. To encourage men of science in their attention to the improvement of agricultural implements, the construction of farm bildings and cottages, the application of chemistry to the general purposes of agriculture, the destruction of insects injurious to vegetation, and the eradication of weeds.

5. To promote the discovery of new varieties of grain, and other vegetables useful to man or for the food of domestic animals.

6. To collect information with regard to the management of woods, plantations and fences, and on every subject connected with rural improvement.

7. To make provision for the improvement of the education of those who depend upon the cultivation of the soil for their support.

8. To take measures for improving the veterinary art, as applied to cattle, sheep and pigs.

9. At the meetings of the society in the country, by the distribution of prizes, and by other means, to encourage the best modes of farm cultivation and the breed of live stock.

10. To promote the comfort and welfare of laborers, and to encourage the improved management of their cottages and gardens.

"Jim, I believe Sam's got no truth in him. You don't know; dar's more truth in dat nigga dan in all de rest on de plantation." "How you make out dat?" "Why, he never *let any out!*"

THE SIGNS OF THE THRIFTY FARMER.

That some farmers thrive while others seem just to drag along is a palpable notoriety. In looking round among our farmers and noticing their operations, we have concluded that we could tell the thrifty farmer by a few unmistakeable signs, even if we know but little about his affairs. You will notice something in his appearance, or the ideas which he appears to be following out, which will tell plainly enough that the farmer is getting ahead in the world. What are the signs? They are not seen in the richness of his dress or the equipage with which he appears abroad, or in the display which he makes in public places. We have seen farmers out in even splendid attire, with fast horses and fine trappings and carriages, who are slovenish farmers, and whose out-standing debts would more than swing the homestead. No, no; we do not take such things for evidence of the farmer's thrift. Then again we do not allow that it is any sign that he is getting "fore hand" when he is seen trading and trafficking, buying, selling and swapping horses, oxen, &c., even, though he be a sharper and makes what he calls good trades. Such very frequently go "astern" by wasting their time in hunting up good bargains and neglecting their farms. These farmers do not love their farming; and they sell the sure gain and large profits of cultivation for a trifling present advantage, often purchased at the expese of conscience and moral honesty. Rather such symptoms are indicative of a want of thrift and healthy prosperity. But when we see a farmer bending all his energies to improve his farm, and making inquiries as to the best methods of husbandry, patronizing agricultaral papers, and taking a due interest in agricultural fairs, associations, &c.; when we hear him inquiring for improved stock, seeds, and fruit trees, we say that man is bound to prosper. Then when his teams are seen round the market places loaded with manure, ashes, or other refuse matter which can be used to improve the soil, or when engaged on a liberal scale in drawing muck, turf, or the like into his yard and filling his manure vats with it, we set it down that he is growing rich. Although he is making great outlays in purchasing and preparing artificial manures, we can not help thinking that he is putting capital into a bank that will yield great dividends. The farmer who will excel and thrive must be a farmer, and give his thought, and study, and effort to his calling; the same as the eminent physician, lawyer, or clergyman gives all his energies to his profession. When this is the case he will show it, and will be as proud of his farm frock as the parson of his cloak. He will not be clownish or indifferent to his outward appearance, but he will not be ashamed to be found dressed suitable for the farm. He will feel as easy and as much at home in his working garb when visited, as the merchant is behind his counter, or the lawyer in his office. When we meet a farmer about his appropriate business who holds up his head and shows a manly dignity, and yet courteous, if thrown among gentlemen of the cloth, we conclude that there is a man who values his manhood, and is proud of his noble calling; that is the man who will thrive and secure a plentiful board for himself and family, and contribute something towards the support of the rest of mankind.—*Farmer and Mechanic.*

THE RULING PASSION.—An eminent London speculator, on witnessing the brilliant success of the electric night-works at the Louvre, was heard to exclaim, with deep feeling, "By Jove! all I have got to say is, if I held any share in the moon, I'd sell out!"

Scrap-Book.

"A little humor now and then,
Is relished by the best of men."

SPRING.

Oh! I love, I love the beautiful Spring,
When leaves and plants are growing;
When the joyous birds in the green wood sing,
And gales o'er the hills are blowing.
And I love, I love the musical note
Of waters that swift through the valleys float,
Their way to the far sea taking;
My spirit it thrills with a holy thought,
And my heart with a gentle love is fraught,
Amid the young year's waking.

Oh! I love, I love the beautiful Spring,
When morn is newly beaming.
And the larks aloft on their missions wing,
Their praise through the ether streaming;
And I love, I love the freshening breeze,
The lowing herds, and the green, green trees,
And the fields of glistening flowers.
The sun rejoices o'er valley and stream,
The mountains he tips with a golden beam,
And lights the budding bowers.

Oh! I love, I love the beautiful Spring,
When day is calmly closing,
And the flowers abroad their fragrance fling,
On the twilight air reposing.
And I love, I love from the hawthorn tree,
The gush of the nightingale's melody,
While the moombeams quiet are sleeping—
When peace like a vale o'er the landscape lies,
And the earth smells sweet as the balmy skies
Their dew-drop tears are weeping.

FACTS.—Should all the inhabitants of the United States cease to use intoxicating liquor, the following would be some of the beneficial results, viz:

1. Not an individual would hereafter become a drunkard.
2. Many who are now drunkards, would reform, and would be saved from the drunkard's grave.
3. As soon as those that would not reform should be dead, which would be a short time, not a drunkard would be found, and the whole land would be free.
4. More than three-fourths of the pauperism of the country might be prevented; and also more than three-fourths of the crimes.
5. One of the grand causes of error in principle, and immorality in practice, and the sources of vice and wretchedness, would be removed.
6. The number, frequency and severity of diseases would be greatly lessened; and the number and hopelessness of maniacs in our land be exceedingly diminished.
7. One of the greatest dangers of our children and one of the principal causes of bodily, mental, and moral deterioration, would be removed.
8. Loss of property in one generation to an amount greater than the present value of all the houses and land in the United States, might be prevented.
9. One of the greatest dangers to our free institutions, to the perpetuity of our government, and to all the blessings of civil and religious liberty, would be removed.
10. The efficacy of the gospel, and all the means which God has appointed for the spiritual and eternal good of men, would be exceedingly augmented; and the same amount of moral and religious effort might be expected to produce more than double its present effects.—*Episcopal Recorder.*

A QUEER OATH.—The following oath was administered to a little boy ten years of age, in the Iowa Legislature, chosen to do up documents: "You do solemnly swear to support the Constitution of the United States and of this State, and to *fold papers* to the best of your ability, so help you God."

A LITTLE INCIDENT.

It was about half-past nine o'clock in the morning; the dense fog, through which we had been running for the last four or five hours, had rendered the track so slippery that we had lost considerable time in climbing the up-grades; but we were now running down a moderate grade, and as the fog was clearing away, we had ventured to increase our speed; and our engineer, ever attentive to his business, was constantly watching the track ahead, which was occasionally enveloped in thick clouds of the watery vapor. As we were thus running along, I observed the engineer raise his hand to the cord attached to the whistle. He held it for a moment, and then gave the signal to "break." Turning my eyes in the direction in which we were moving, I was barely able to discern some object upon the track a considerable distance ahead, but could not make out what it was. A moment later the engineer repeated the signal to "break," in that peculiar startling manner which is instantly recognized by the experienced brakesman as an indication of imminent danger. The engine was reversed as if by magic, and as the steam was applied, the driving wheels whirled round in an opposite direction to that in which the train was moving. I now discovered that the object before us was a little child, apparently unaware of its danger. The almost constant screaming of the whistle with which the engineer sought to frighten it from the track seemed only to amuse it. The wheels of our engine grated and hissed upon the iron track, unable to stop the train, which, owing to the slippery condition of the rails, it was certain it would send us far beyond where the child was standing before we could stop. Thus we rushed on with the almost certainty that in the next minute that innocent, unsuspecting child, too young to know its danger, would be a mangled corpse. Turning my eyes to see if there was no one near to save it, I saw a lady who seemed to be almost flying toward the child, but one glance showed me that the engine must reach it before her. The engineer had left his post, and was now running rapidly along the frame to the front of the engine. In an instant he was crouching upon the "cow-catcher," with one foot upon its lower bar, his left hand holding to the framework, and his right extended toward the child, which, at the very moment it would have been crushed, he caught by its little arm, raised it from the track, and bore it along in safety. One more minute, and the child, uninjured, was restored to its mother's arms.—*Life Illustrated.*

A genuine Down-Easter essaying to appropriate a square of exceedingly tough beef at dinner, in a Wisconsin hotel, his convulsive efforts with a knife and fork attracted the attention and smiles of those in the same predicament as himself. At last Jonathan's patience vanished under ill-success, when laying down his utensils, he burst out with, "Strangers, you needn't laff—if you haint got any regard for the landlord's feelings, *you orter have some respect for the poor old animal.*—This sally "brought down the house."

THE BEST THING OUT.—A friend has furnished us with the following copy of a *sign* over the door of a respectable looking house near Chichester, England:—"HER LIFS 1 OO QUERS A GOOS."

Any joker that can translate the above at one reading, can "take our hat!" We have

frequently published "the march of the schoolmaster," but recollect nothing equal to this. Now, if you desire to have some fun, just "turn down the leaf," and ask a friend to *translate* it. We subjoin it :—HERE LIVES ONE WHO CURES AGUES." Supposed to be "some pumpkins," more or less!—*Spirit of the Times.*

A lady wished a seat. A portly handsome gentleman brought one and seated the lady.

"O, you're a jewel," said she.

"O, no," replied he, "I'm a jeweler; I have just set the jewel!"

AN IRISHMAN'S WILL.—I will and beqneath my beloved wife, Bridget, all my property, without reserve; and to my eldest son Patrick, one half of the remainder; and to Dennis, my youngest son, the rest. If anything is left, it may go to Terrence McCarty."

He who can not keep his own secret ought not to complain if another tells it.

ANSWER TO INQUIRIES ABOUT BACK NUMBERS, &c.—Back numbers from the beginning of the present volume can still be supplied at 4 cents per number.

Volumes XI, XII, and XIII can be supplied at $1 per volume unbound; or $1.50 per volume bound.

The first ten volumes (new edition) can be furnished bound at $1.25 per volume, or the complete set of ten volumes for $10. Price of the first thirteen volumes $14 50.

No new edition of the volumes subsequent the tenth will be issued, as the work is too large to admit of stereotyping.

Markets.

REMARKS.—Flour has advanced 12½ to 25 cts. per bbl. the past week. Corn is 2 cts. per bushel higher.

Cotton is rather flat. Prime Rice is 25 cts. higher. Sugar and Tobacco in good demand.

Money continues pretty easy, notwithstanding the recent disastrous news of bankers' failures in California, and a partial stoppage of exportation of gold dust.

The Weather is very cold and windy for the last of March, and the season, thus far, is about the same as it was last year, but all of ten days behind that of 1853.

PRODUCE MARKET.

TUESDAY, March 27, 1855.

The prices given in our reports from week to week, are the average wholesale prices obtained by producers, and not those at which produce is sold from the market. The variations in prices refer chiefly to the quality of the articles.

The supply of nearly all kinds of produce is still very limited. There are scarcely any Mercers in Market, and, in fact, not enough potatoes of any kind to meet the demand. The supplies from New-Jersey are nearly ended, while farmers hold them so high at the west, that dealers have little room for profit. One thing is certain, that either farmers must ease off there, or prices will advance here.

Onions, too, are very scarce, and enormously high. Last fall Red Onions might have been bought for $1 ℔ bbl., and White for $2 75, and then were nearly all purchased into market at those prices.

The apple market continues about the same. It is more difficult to give the exact price of each kind separately, since they are usually bought up by the quantity. The average price to-day for good apples is $3 75@$4 ℔ bbl.; this includes all kinds.

Butter remains firm. Some fancy Orange Co. butter goes as high as 33c., but there is not enough of this to be worth quoting. Cheese is a little higher. Eggs are very fluctuating, owing, perhaps, to the instability of the hens. Yesterday they were 17c.; to-day, 19@19½c.

VEGETABLES.

Potatoes—New-Jersey Mercers	℔ bbl.	$4	—@4 50
Western Mercers	do	4	—@4 25
White Mercers	do		—@4 —
Nova Scotia Mercers	do		—@3 75
New-Jersey Carters	℔ bbl.	4 50	@5 —
Washington County Carters	do	4	—@4 25
Junes	do	3 25	@3 50
Western Reds	do	2 75	@3 —
Yellow Pink Eyes	do	2 75	@3 25
Long Reds	do	2 25	@2 75
Virginia Sweet Potatoes	do	4 50	@ —
Philadelphia sweet	do	none	
Turnips—Ruta Baga	do	1 50	@1 75
White	do	1 25	@1 50
Onions—White	do	6	—@6 50
Red	do	3 50	@3 75
Yellow	do	4 75	@5 —
Cabbages	℔ 100	6	—@12 —
do	℔ doz.	1	—@1 87
Beets	℔ bbl.	1 50	@1 75
Carrots	do	1 62	@1 87
Parsnips	do	1 87	@2 —

FRUITS, ETC.

Apples—Spitzenbergs	℔ bbl.	$4 00	@4 50
Greenings	do	3 50	@4 00
Gilliflowers	do	3 50	@4 00
Baldwins	do	3 75	@4 24
Butter—Orange County	℔ lb.	25@30c.	
Western	do	18@20c.	
Cheese	do	12@13½c.	
Eggs	℔ doz.	19@19½c.	

NEW-YORK CATTLE MARKET.

WEDNESDAY March 28, 1855.

The weather to-day is raw and cutting, but, however, favorable for the market, which manifests greater activity than we have seen before for some time. The Yards contain about the usual supply of cattle, with the tendency of the market still upward. The brokers chuckle over the prices much more than the butchers; though there is less room for profit than might be supposed, since cattle are held so high at the west. At Chicago they command 5@6c. ℔ lb, live weight, and in Ohio, it is said, for every rise of a quarter here they advance a half there.

The appearance of the animals to-day is very gratifying. We do not remember to have seen a greater supply of good beeves for a long time, and, we are glad to say, less poor ones. A dozen very choice animals were selling from 13 to 14c. ℔ lb.

Complaints are sometimes made that our quotations are given too high, and that many farmers, finding good cattle bringing a high price, send their cattle to market as good of course. Now we seek not the interests of any one in particular; we give the prices of both good and poor, but if men wrongly estimate the quality of their cattle, that is their fault, not ours.

By the way, we would denounce the custom of marking cattle with knives, as intensely heathenish. Such cruelty exceeds even the barbarism of savages, and if those who practice it do not experience similar usage, let them claim no merit to themselves.

We append below a few of the cattle offered:

John Merritt was selling a fine lot belonging to Perrill & Seymour, of Ross Co., Ohio. Some of these went as high as 12½c., though the average price was about 12c. They would weigh about 825 lbs., and came through on the Erie road at a cost of $15 ℔ head.

Joseph Williams had a good lot of 80, from Indiana, owned by Major Bell, and selling from 11 to 12c. Also, 34 fair Durham grades, owned by R. R. Seymour, of Ross Co., Ohio, bringing about 11c.

Edward Wheaton sold 6 superior beeves to Geo. Haws, of Fulton Market, for $9 75—about 13c. ℔ lb.

W. T. Taylor had a good lot from Pickaway Co., Ohio, selling by Chas. Teed at about 11½. There was 133 in all.

Mr. McConnell had a drove of young Ohio cattle, 105 in number, which were selling by Mr. White for about 12c. These were Durham grades and an excellent lot.

Hiram Ranney had 6 handsome beeves from Phelps, Ontario Co., which he held at $12. They had been fed 2 years, would doubtless weigh 1,300 each, and were about as fine as one could wish. When we came away, they were unsold, though Mr. Ranney had an offer of $10 75. Such cattle do not pay for feeding, but there is a deserving credit and pride in bringing them to market.

Sam'l McGraw, at Browning's, reports sales of 71 cattle from 8½c. to 11½c.

The following are about the highest and lowest prices:

Extra quality at	12½@13½c.
Good retailing quality beef is selling at	11@12½c.
Inferior do. do.	9½@11c.
Beeves	9½c.@13½c.
Cows and Calves	$30@$65.
Veals	4½c.@7½c.
Sheep	$4@$8 00.
Swine, alive,	5c.@5½c.
" dead,	—@7½c.

Washington Yards, Forty-fourth-street.

A. M. ALLERTON, Proprietor.

RECEIVED DURING THE WEEK.		IN MARKET TO-DAY.
Beeves,	2487	1567
Cows,	263	——
Veals,	725	——
Sheep and lambs,	6347	——
Swine,	3434	——

Of these there came by the Erie Railroad—beeves		1219
Swine		2529
Sheep		942
Veals		—
By the Harlem Railroad—Beeves		44
Cows		56
Veals		545
Sheep and Lambs		749
By the Hudson River Railroad		942
Veals		17
Sheep and Lambs		174
Swine		506
New-York State furnished		108
Ohio, "		976
Indiana, "		187
Illinois, "		295
Virginia. "		—
Kentucky, "		—
Connecticut, "		8
New-Jersey. "		—

The report of sales for the week, at Browning's, are as follows:

Sheep and Lambs	2548
Beeves	251
Veals	94
Cows and Calves	53

SHEEP MARKET.

Wednesday, March 28, 1855.

The market still continues good with a limited supply on hand. At Browning's there were only 300 or 400, and about the same at Chamberlain's. The following are the sales of Jas. McCarty, Sheep broker at Browning's:

50	Sheep	$306 25
4	do.	26 00
10	do.	70 00
51	do.	210 38
2	do.	10 00
116	do.	412 50
10	do.	65 00
5	do.	54 00

PRICES CURRENT.

Produce, Groceries, Provisions, &c., &c

Ashes—		
Pot, 1st sort, 1853	℔ 100 lb.	— —@ 6 25
Pearl, 1st sort, 1852		6 25@— —
Beeswax—		
American Yellow		— 26@— 27
Bristles—		
American, Gray and White		— 45 @—50
Coal—		
Liverpool Orrel	℔ chaldron	— — @ 7 25
Scotch		— — @— —
Sidney		7 — @ 7 —
Pictou		6 25 @— —
Anthracite	℔ 2,000 lb.	7 — @ 7 50

Cotton—

	Upland.	*Florida.*	*Mobile.*	*N. O. & Texas.*
Ordinary	8¼	8¼	8¼	8¼
Middling	9¼	9¼	9¼	9¼
Middling Fair.	10	10	10¼	10¼
Fair	10¼	10¼	11¼	11¼

Cotton Bagging—			
Gunny Cloth	℔ yard	— 11¼	@— —
American Kentucky		— —	@— —
Dundee		— —	@— —
Coffee—			
Java	℔ lb.	— 13	@— 14¼
Mocha		— 14	@— 15
Brazil		— 10	@— 11¼
Maracaibo		— 11	@— 12¼
St. Domingo	(cash)	— 9	@— 9¼
Flax—			
Jersey	℔ lb.	— 8	@— 9
Flour and Meal—			
State, common brands		9 —	@ 9 12
State, straight brands		9 12	@— —
State, favorite brands		9 25	@— —
Western, mixed do		9 37½	@— —
Michigan and Indiana, straight do		9 50	@ 9 62
Michigan, fancy brands		9 75	@— —
Ohio, common to good brands		9 62½	@ 9 75
Ohio, fancy brands		— —	@ 9 81
Ohio, Indiana, and Michigan, extra do		— —	@10 00
Genesee, fancy brands		9 75	@10 25
Genesee, extra brands		11 50	@12 50
Canada, (in bond,)		9 12	@— —
Brandywine		9 37	@— —
Georgetown		9 37	@ 9 75
Petersburg City		9 37	@— —
Richmond Country		— —	@ 9 37
Alexandria		— —	@ 9 37
Baltimore, Howard-Street		— —	@ 9 37
Rye Flour		6 25	@— —
Corn Meal, Jersey		4 25	@— —
Corn Meal, Brandywine		4 50	@— —
Corn Meal, Brandywine	℔ punch	— —	@21 —
Grain—			
Wheat, White Genesee	℔ bush.	2 70	@ 2 75
Wheat, do. Canada, (in bond,		— —	@ 2 30
Wheat, Southern, White		2 25	@ 2 30
Wheat, Ohio, White		2 50	@— —
Wheat, Michigan, White		2 52	@ 2 60
Rye, Northern		1 37	@— —
Corn, Round Yellow		— 97	@ 1 —
Corn, Round White		— —	@— 97
Corn, Southern White		— —	@— 97
Corn, Southern Yellow		— 98	@— 99
Corn, Southern Mixed		— —	@— —[1]
Corn, Western Mixed		— 97	@—98
Corn, Western Yellow		— —	@— —.
Barley		1 25	@— —[1]
Oats, River and Canal		— 65	@— —

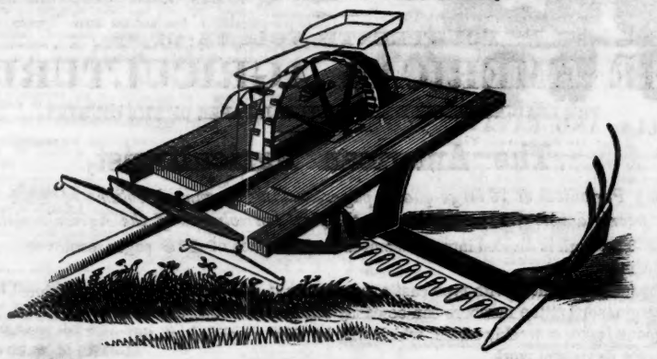
Oats, New-Jersey		— 55	@— 58
Oats, Western		— 63	@— 68
Peas, Black-Eyed	℔ bush.	2 25	@— —
Hay—			
North River, in bales		— 80	@— —
Lime—			
Rockland, Common	℔ bbl	— —	@1 —
Lumber—			
Timber, White Pine	℔ cubic ft.	— 18	@— 24
Timber, Oak		— 25	@— 30
Timber, Grand Island, W. O.		— 35	@— 38
Timber, Geo. Yel. Pine,	(by cargo)—	18	@— 22
	YARD SELLING PRICES		
Timber, Oak Scantling	℔ M. ft.	30 —	@40 —
Timber, or Beams, Eastern		17 50	@19 75
Plank, Geo. Pine, Worked		— —	@40 —
Plank, Geo. Pine, Unworked		20 —	@25 —
Plank and Boards, N. R. Clear		37 50	@42 50
Plank and Boards, N. R. 2d qual		25 —	@32 —
Boards, North River, Box		16 —	@18 —
Boards, Albany Pine	℔ pce.	— 14	@— 20
Boards, City Worked		— 22	@— 23
Boards, do. narrow, clear ceiling		— —	@— 25
Plank, do. narrow, clear flooring		— 25	@— —
Plank, Albany Pine		— 24	@— 30
Plank, City Worked		— 24	@— 29
Plank, Albany Spruce		— 17	@— 24
Plank, Spruce, City Worked		— 22	@— 24
Shingles, Pine, sawed	℔ bunch.	2 25	@ 2 75
Shingles, Pine, split and shaved		2 75	@ 3 —
Shingles Cedar, 3 ft. 1st qual	℔ M.	24 —	@28 —
Shingles, Cedar, 3 ft. 2d quality		22 —	@25 —
Shingles, Cedar, 2 ft. 1st quality		19 —	@21 —
Shingles, Cedar, 2 ft. 2d quality		17 —	@18 —
Shingles, Company, 3 ft		32 —	@— —
Molasses—			
New-Orleans	℔ gall.	— 23	@— 26
Porto Rico		— 27	@— 32
Cuba Muscovado		— 22	@— 26
Trinidad Cuba		— 23	@— 26
Cardenas, &c		— —	@— 24
Oil Cake—			
Thin Oblong, City	℔ tun.	30 —	@45 —
Thick, Round, Country		— —	@— —
Provisions—			
Beef, Mess, Country,	℔ bbl.	9 50	@11 —
Beef, Mess, City		10 —	@— —
Beef, Mess, extra		16 —	@— —
Beef, Prime, Country,		— —	@ 7 —
Beef, Prime, City		— —	@— —
Beef, Prime Mess	℔ tce.	21 —	@26 —
Pork, Prime		14 25	@— —
Pork, Clear		17 —	@— —
Pork, Prime Mess		— —	@— —
Lard, Ohio, prime, in barrels	℔ lb.	— 10	@— —
Hams, Pickled		— —	@— —
Shoulders, Pickled		— —	@— —
Beef Hams, in Pickle	℔ bbl.	— —	@— —
Beef, Smoked	℔ lb.	— —	@— —
Butter, Orange County		— 30	@— 32
Cheese, fair to prime		— 10½	@— 12
Rice—			
Ordinary to fair	℔ 100 lb	3 50	@ 3 87
Good to prime		4 37½	@ 4 47½
Salt—			
Turk's Island	℔ bush.	— —	@— 52
St. Martin's		— —	@— —
Liverpool, Ground	℔ sack.	1 —	@— —
Liverpool, Fine		1 30	@ 1 40
Liverpool, Fine, Ashton's		1 40	@— —
Sugar—			
St. Croix	℔ lb.	— —	@— —
New-Orleans		— 4¼	@— 5¼
Cuba Muscovado		— 4½	@— 5½
Porto Rico		— 5	@— 6½
Havana, White		— 7½	@— 8
Havana, Brown and Yellow		— 5	@— 7½
Tallow—			
American, Prime	℔ lb.	— 11½	@— 12
Tobacco—			
Virginia	℔ lb	—	@— 6½
Kentucky		— 7	@— 10
Maryland		— —	@— —
St. Domingo		— 12	@— 18
Cuba		— 17	@— 20
Yara		— 40	@— 45
Havana, Fillers and Wrappers		— 25	@ 1 —
Florida Wrappers		— 15	@— 60
Connecticut, Seed Leaf,		— 6	@— 15
Pennsylvania, Seed Leaf		— —	@— —
Wool—			
American, Saxony Fleece	℔ lb.	— 38	@— 42
American, Full Blood Merino		— 36	@— 37
American, ¾ and ¾ Merino		— 30	@— 33
American, Native and ½ Merino		— 25	@— 28
Superfine, Pulled, Country		— 30	@— 32
No. 1, Pulled, Country		— 21	@— 23

Advertisements.

TERMS—(invariably cash before insertion):

Ten cents per line for each insertion.
Advertisements standing one month one-fourth less.
Advertisements standing three months one-third less.
Ten words make a line.
No advertisement counted at less than ten lines.

ALLEN'S PATENT MOWER.



THE MOST PERFECT MACHINE YET INVENTED.

THIS MACHINE was patented in 1852, and has been used by a large number of intelligent farmers for two seasons; and so superior has it proved itself over all others, that it is now greatly preferred wherever known.

This superiority consists:

1st. In perfectly cutting any kind of grass, whether fine or coarse, lodged or standing, and Salt Meadows as well as upland.

2d. Owing to the form of the knife and its rasp patent, it does not clog even in the finest grass.

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